Interprovincial Transit Strategy for Canada's Capital Region

CONNECTING COMMUNITIES

January 2013

















ACKNOWLEDGEMENTS

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The National Capital Commission

The City of Ottawa, and

The Société de transport de l'Outaouais

The City of Gatineau

by the consulting team of

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AECOM

PACE Public Affairs & Community Engagement

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International Panel

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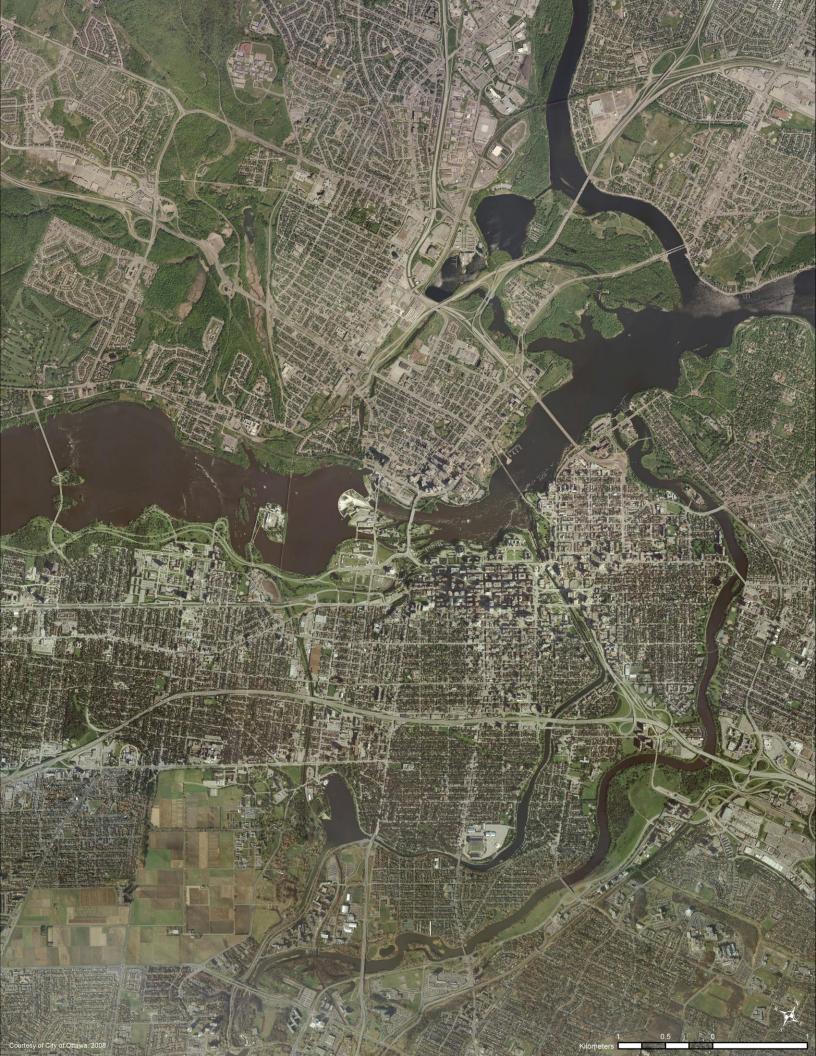
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SUPPORTING MATERIALS

Existing Transportation Conditions and Issues Report Consultation Reports Evaluation Criteria & Process Report The Five Pillar Reports Modeling Analysis Report





INTRODUCTION

Partners:









The Interprovincial Transit Strategy is a collaborative effort led by the National Capital Commission (NCC), the Société de transport de l'Outaouais (STO) and the City of Ottawa as funding partners, with the participation of the Ville de Gatineau. The Strategy reflects each partner's commitment to creating a world class National Capital Region (NCR) that makes best use of comprehensive, efficient and sustainable transportation networks. It is also part of a shared common goal to make the core areas of Gatineau and Ottawa a more vibrant, livable and attractive place, with less reliance on private vehicles.

The urban area of the NCR is already well served by transit, with the two operators, OC Transpo and STO, providing comprehensive services ranging from the fast and frequent Ottawa Transitway and O-Train, and the Gatineau Rapibus (to be operational by fall 2013), to door-to-door para-transit options. However, the physical and political boundaries between the two provinces provide challenges to the development of a truly comprehensive transit service for the National Capital.

The Strategy describes a model of sustainable mobility and environmentally friendly transportation where options are seamless, user focused and value added. It aims to set out the steps needed to create a transit service worthy of the National Capital. It is the result of a large scale public engagement exercise, consideration of global best practices, and includes a range of policy, operational and infrastructure improvements. This varied work is brought together into a set of principles and a project implementation plan.

This Strategy document describes the overall transit vision, recommended solutions and action plan describing how and when the solutions should be implemented. Further detail explaining how the recommended solutions were developed and analyzed including the consultation and modeling analysis is available in the *Supporting Material Reports*.

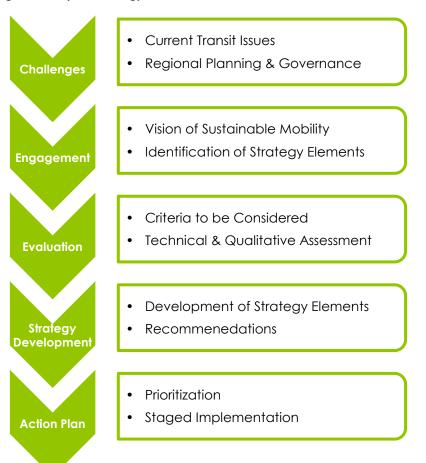
Overview of Study Process and Methodology

In August 2008, the NCC, City of Ottawa and STO, in collaboration with Ville de Gatineau, issued a call for proposals to be submitted to address the interprovincial transit service through a planning study that was directed toward the integration of the services provided by OC Transpo and STO. MRC and AECOM, together with PACE Public Affairs & Community Engagement and Urban Strategies were selected for this undertaking.

The methodology for the Strategy is shown Figure 1 and included public engagement at every stage. The solutions included as part of the Strategy are the result of both professional and technical knowledge and input from the general public and stakeholders.

Figure 1: Study Methodology

Study Goal



Study Goal

The paramount goal of this study is to provide strategic input and direction towards increasing the benefits, efficiency and relevance of interprovincial transit in the NCR by a more integrated and seamless interprovincial system that will increase and promote transit ridership as a viable and primary travel option for commuters and visitors to the National Capital through improved quality of service and a more attractive system.

This goal may be accomplished by improved or expanded services and infrastructure, enhanced connections and transfers, and improved coordination between OC Transpo and STO networks.

Source: Statement of Work

A Transit Region in the Making: Ottawa and Gatineau on the Move

There are several projects and studies that are either underway or have been already approved which are integral to the Interprovincial Transit Strategy. Listed below are brief descriptions of the key projects and studies related to transit and mobility in the Capital Region:

City of Ottawa Official Plan (OP) and Transportation Master Plan (TMP)

These plans provide the basis for the development of a network of transit corridors to increase transit modal shares (up to 30% by 2031) and to support sustainable development. A major policy objective within the plans is to build livable communities in which transit and other sustainable modes such as cycling and walking are integrated. The studies identify the need for a rail facility that will operate through the core area in a tunnel with routes that extend to Blair, Baseline, the Airport and Riverside South. As well, the TMP includes the expansion of Bus Rapid Transit (BRT) corridors and supplementary transit corridors to enhance transit priority and encourage development within the urban area. Passengers would then be required to transfer from BRT and local buses onto the rail facility to access the core from suburban communities.

Ottawa's Light Rail Transit Project (OLRT)

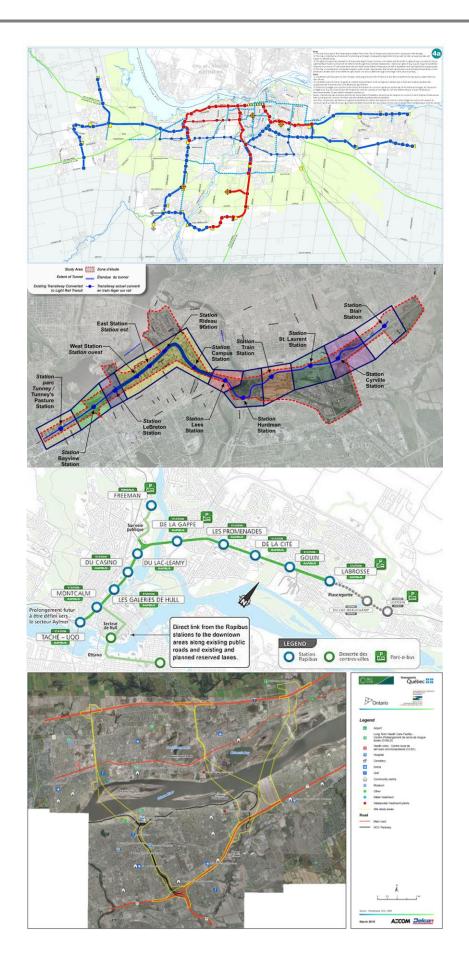
The Downtown Ottawa Transit Tunnel (DOTT) Environmental Assessment was approved in January 2010 and includes the first phase of LRT construction in Ottawa from Blair Station to Tunney's Pasture using the existing Transitway and a new tunnel under the downtown core area. The project is now in the design and implementation stage and is expected to be complete and operational in 2018.

STO Rapibus

The Rapibus is a high-frequency Bus Rapid Transit (BRT) facility that utilizes an exclusive bus corridor extending from the Gatineau sector near boulevard Labrosse to the downtown cores. It includes eleven stations offering many amenities, high capacity buses, new incentive parking facilities, separate marketing and an adjacent bicycle path. Two Rapibus routes will operate within the corridor with separate destinations to Hull and Ottawa. Passengers will use local buses to access the Rapibus stations and transfer onto the frequent, high capacity buses. Operations will be simplified in the afternoon as passengers will board the next bus instead of waiting for a particular bus route. Passengers would then transfer onto their local bus at their neighbourhood Rapibus station. The Rapibus facility is expected to be completed in 2013 with plans for future extensions to Lorrain Station. Aylmer routes are expected to continue into downtown Ottawa until such time as a west rapid transit corridor is implemented.

NCC Interprovincial Crossings Environmental Assessment (EA)

The EA for a new interprovincial crossing on the east side of the core areas is currently underway. Phase I of the EA is complete and provided the justification for the river crossing and identified three potential crossing alternatives. The bridge is intended to appropriately connect the major highways between Ottawa and Gatineau providing an alternative for commercial vehicles crossing via core area bridges. The new link could also enhance public transport, through its ability to link with present and future transit infrastructure and encourage greater transit use. Phase II of the EA will further develop and evaluate the alternative crossings in order to select the recommended location. The EA and approval process is expected to extend until the end of 2013.



2031 Ottawa Rapid Transit Network

Source: 2008 Ottawa Transportation Master Plan www.ottawa.ca

Phase I of Ottawa LRT Construction (2018)

Source: Downtown Ottawa Transit Tunnel EA <www.ottawalightrail.ca>

Gatineau Rapibus (2013)

Source: Société de transport de l'Outaouais Rapibus <www.rapibus.sto.ca>

Interprovincial Crossing EA Alternatives

Source: Interprovincial Crossings EA Website <www.ncrcrossings.ca> Key plans and policies that inform the development of the Strategy include:

- Ottawa 2008 Official Plan
- STO 2005-2015 Strategic Plan
- City of Gatineau Strategic Plan
- NCC Strategic Transportation Initiative
- NCC Plan for Canada's Capital (1999)
- NCC Canada's Capital Core Area Sector Plan
- City of Ottawa Downtown Urban Design Strategy 2020
- Downtown Gatineau Vision 2025
- City of Ottawa Transit Oriented Development Guidelines
- STO Transit and Road Systems Integrated Plan

In addition, there are future studies and studies underway the Strategy can inform:

- City of Gatineau Transportation and Active Mobility Plan
- City of Ottawa Mobility Overlay
- City of Ottawa Western LRT Planning & EA
- Feasibility study for a west Gatineau rapid transit facility (STO)
- NCC Horizon 2067
- NCC Capital Urban Lands Master Plan

Considering the planning that has occurred by the study partners, the region lacks an integrated transit vision. This strategy considers all the plans and policies developed to date and presents an approach to achieve a common and unified goal for improved transit and mobility for the NCR.



The Components of the Strategy:

The Strategy consists of two volumes, the *Strategy Document* and the *Supporting Materials*.

The Strategy Document consists of:

- A vision of sustainable mobility for the future of Canada's Capital
- A discussion of current challenges for transit in Canada's Capital Region
- A description of the stakeholder and community engagement process
- Five integrated transportation pillars aimed at achieving the vision
 - Transit City Building
 - Focusing on the User
 - Operations
 - Infrastructure
 - o Governance
- An action plan showing how the Five Pillars and their solutions should be implemented

The Supporting Materials include:

- Details regarding the existing population and employment levels, travel patterns and mode shares, and identified issues
- Descriptions of the consultation process, materials presented and comments received. Reports have been prepared for each phase of consultation as well as the international workshop that was conducted.
- Explanations of the evaluation criteria that have been developed and considered throughout the Strategy
- Separate reports focusing on each Pillar of the Strategy. Each report
 includes descriptions of possible solutions, the analysis and evaluation,
 as well as the relevant feedback received through the consultation
 program
- A modeling analysis that documents the existing travel demand, the planned growth, and the technical impacts of various operational and infrastructure solutions in the medium (2021) and long term (2031)

Supporting Materials:

- Existing Transportation Conditions and Issues Report
- 2) Consultation Reports:
 - Phase 1 Consultation
 - International Workshop
 - Phase 2 Consultation
 - Phase 3 Consultation
 - Phase 4 Consultation
- 3) Evaluation Criteria and Process Report
- 4) The Five Pillar Reports
 - Transit City Building
 - · Focusing on the User
 - Operations
 - Infrastructure
 - Governance
- 5) Modeling Analysis Report





According to the National Capital Commission, the vision of the Capital of the Future (in 2067) is:

- vibrant, dynamic, inclusive and tuned into Canadians;
- a window on the world and open to all
- a model of sustainable mobility and environmentally-friendly transportation;
- concerned with preserving its natural, cultural and heritage features;
- at the forefront of urban, architectural and engineering innovations;
- a place of networking, partnership and collaboration

Source: Vision for Canada's Capital

THE ROLE OF TRANSIT IN THE FUTURE OF THE CAPITAL

The National Capital Commission and its predecessor organizations have been working since 1899 to make the capital 'an expression of the Canadian identity'. The central cores of Ottawa and Gatineau contribute significantly to this goal as the locations for civic and government buildings and activity as well as shopping, leisure and cultural centres.

Both the City of Ottawa and Ville de Gatineau have been developing Transportation Master Plans which highlight sustainable mobility options and look to the positive impact that rapid transit technology will have on movement and quality of life within the region.

With a total population of over 1 million residents and employment of over 600,000, the National Capital Region is a significant urban centre with a variety of attractions for travelers. The day to day working requirements of busy, growing cities are combined with the need to consider the special aims and objectives of a capital city.

Source: TRANS

Challenges for Transit in Canada's Capital Region

The Capital Region is undergoing increases in population and employment. As a result, there is tremendous pressure on the urban environment and infrastructure. Transportation and quality of life are impacted by the need to move more people through and within existing communities. The number of buses in the core area has been increasing to serve both Ottawa and Gatineau commuters.

OC Transpo has been operating approximately 180 buses per hour per direction on the Central Area Transitway (Albert and Slater Streets) and has determined that this is the maximum number of buses that can be accommodated on these streets. Additional transit capacity is being provided by operating more articulated buses through the core and requiring passengers to transfer onto the high capacity buses for access through the core. Ottawa has identified the need for upgrading the existing Transitway to a rail technology to better serve their residents and accommodate future growth. The implementation of a downtown transit tunnel will allow the City to improve the surface environment by removing most of the existing buses from Albert and Slater Streets.

The majority of interprovincial transit services are provided by STO with approximately 120 buses per hour crossing interprovincial bridges. The service connects directly to downtown Ottawa using Rideau Street, Wellington Street, and King Edward Avenue. With the implementation of the Gatineau Rapibus and the reorganization of STO routes, there will be a reduction in the number of buses that travel into Ottawa. Interprovincial buses will be better utilized since there will be separate Rapibus routes to serve downtown Gatineau and Ottawa. As well, STO will be introducing articulated buses for the Rapibus routes, further reducing the number of bus engines on core areas streets.

Below are descriptions of the challenges that need to be addressed to create an interprovincial transit system that fulfills the needs of the people of Canada's Capital Region over the next twenty years.

Quality of the Urban Environment

The Interprovincial Transit Strategy recognizes that transit and other sustainable transportation modes are central to the future quality of life and economic development of the National Capital Region. As the

Figure 2: Planned Growth

2,000,000
1,500,000
1,000,000
2005
2031
Population
Employment









Transit Agency Statistics

OC Transpo:

• Fleet = 1,025 buses

3 LRV

Routes = 247 fixedRidership = 94 M / yr

STO:

Fleet = 277 buses
 Routes = 62 fixed
 Ridership = 19.3 M / yr

(CUTA 2008)

Core Area Transit Services:

AM Peak Hour

OC Transpo:

- 180 bus/hr WB Albert St
- 180 bus/hr EB Slater St
- 40 bus / hr on Rideau/Wellington

STO:

PM Peak

 120 bus/hr on Rideau/Wellington & King Edward

Interprovincial Transit Share

AM Peak = 25% Midday = 10%

= 21%

(2005 OD Survey)

Note: existing trip patterns are presented based on the 2005 OD survey as this is the best representation of existing conditions. The TRANS model that is used to forecast future transportation demand is based on this OD survey.

region grows, these modes will be essential to ensuring that the region builds on its successes while meeting the challenges associated with this growth. Therefore, the following challenges, as they relate to the urban environment, will need to be addressed in order to improve the quality of life for residents and visitors to Canada's Capital Region. Specifically, there is need to:

- <u>Improve</u> land use transportation policies and regulations and enhance coordination between jurisdictions;
- Increase mixed use development and urban design initiatives;
- <u>Enhance</u> station design and connections for all modes of transportation;
- Focus urban rights of way on all modes of transportation.

Transit Operational Challenges

There are challenges to operating a transit system in the NCR. Below are descriptions of the prominent issues:

- The majority of interprovincial transit service is focused on the downtown core.
- There is currently a high volume of buses traveling through the downtown cores.
- Growing interprovincial demand will result in additional congestion on existing interprovincial bridges and a high volume of buses in downtown Ottawa, impacting service reliability.
- The City of Ottawa does not support the increase of STO buses on Ottawa streets and the NCC would like to see a reduction of buses on the "Confederation Boulevard".
- Inefficient turn-back routings in the central area results in empty deadheading buses traveling over the interprovincial bridges between the two downtown areas. This also leads to a requirement for lay-up areas in downtown Ottawa and Gatineau.
- The lack of effective midday interprovincial transit services for tourists and government workers.

Managing traffic congestion in the downtown cores

Traffic congestion in the downtown cores, together with limited and expensive parking facilities, is impacting the attractiveness of car travel. Greater demand is now being placed on public transit, and concerns for the environment are growing. Over the years this has translated into more, larger buses downtown, impacting residents, property owners and the overall urban ambience. These problems have been particularly

serious on Albert Street, Slater Street, Wellington Street and Rideau Street in Ottawa, and boulevard Maisonneuve, rue Laurier, rue Eddy, and du Portage in Gatineau. Transit services must be coordinated to become more efficient, particularly when catering to commuters, limiting unnecessary car journeys as well as unproductive bus time.

Regional Planning of Transit Infrastructure

For the period of this Strategy (2031), the urban areas of the NCR will have a combination of bus and light rail rapid transit, making the design and operation of interchange points and river crossings of great importance to ensure that the transit rider has a seamless travel experience. There will of course, always be a need for buses to provide accessible and frequent services to those areas not served directly by rapid transit as well as serving local trips in and around the core. The implementation of the OLRT in Ottawa and Rapibus in Gatineau leads to the public perception of completely separate rapid transit infrastructure facilities that are and will never be integrated.

The Capital region is subject to a multitude of governing institutions at all three levels of government. This in itself is a challenge in that each government agency and transit property has its own mandate and approach to transportation and land use planning resulting in potential conflicting priorities, goals and objectives.

Infrastructure planning is generally focused on the needs of the residents within each municipal jurisdiction resulting in transit facilities that meet their own needs while having limited flexibility with transit services outside their jurisdictions.

The implementation of the OLRT through a tunnel in the downtown will not result in the complete elimination of surface transit. While its introduction will reduce bus operations on Albert and Slater Streets, buses will continue to operate on Rideau Street and Wellington Street for STO services. Local OC Transpo buses will also continue to operate in the core area. These operations will continue until such time as additional interprovincial transit infrastructure is developed.

The jurisdictional boundaries also result in unique funding and governance arrangements for interprovincial infrastructure, and any future rail facility that crosses the Ottawa River between provinces would require compliance with federal rail regulations.

Trip Direction

(Interprovincial Trips Only)

AM Peak Period

• 69 % of trips are from Gatineau to Ottawa

PM Peak Period

• 65 % of trips are from Ottawa to Gatineau

Trip Destinations: AM Peak (Interprovincial Trips Only)

GATINEAU TO OTTAWA

- 53% of trips are destined to the Core & Inner Area
- 38% are between nondowntown locations

OTTAWA TO GATINEAU

- 52% are destined to the Core & Centre Area
- 40% are between nondowntown locations

Mode Split: AM Peak (Interprovincial Trips Only)

- 24% transit for all interprovincial trips
- 46% transit for trips from Gatineau to the Ottawa Core & Inner Area
- 40% transit for trips from Ottawa to the Gatineau Core & Centre Area
- 10% transit for nondowntown trips

(2005 OD Survey)

The identified geographical regions are presented in the *Supporting Materials – Existing Conditions Report*.

Transit and the high-density development that accompanies it both have tremendous value in reducing greenhouse gas emissions and putting us on the path to a low-carbon economy.

Nancy Pelosi, Keynote Address APTA; June 2, 2008

Dans l'optique du développement durable et de la constitution des villages urbains dans Gatineau, le service de transport en commun jouera en 2015 un rôle déterminant dans l'atteinte de la qualité de vie accrue à laquelle aspirent les citoyens de Gatineau et de sa région d'influence.

2005-2015 STO Strategic Plan

It will be important to stay the course traced by the 1994 integrated transportation plan by developing a mobility plan that aims to discourage single passenger use of automobiles in favour of active modes, and public transit.

2009-2014 Gatineau Strategic Plan

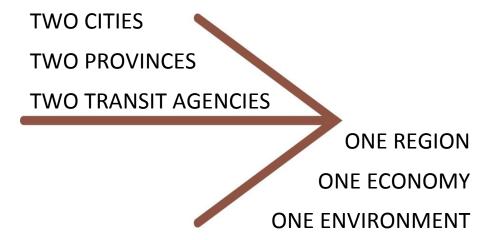
The City's transit strategy recognizes that substantial increases in ridership call for greater availability, reliability, speed and comfort of transit service. All of these will be achieved or enabled by expanding Ottawa's rapid transit system—the cornerstone of Ottawa's transit strategy

2008 Ottawa Transportation Master Plan

The Importance of Transit in the Future of the Capital

Transit is the key to the vision of sustainable mobility and environmentally-friendly transportation in and around the NCR. It makes the region run more smoothly, with less impact on the environment, enabling vital functions such as employment, retail, culture and education. However, in the National Capital, this facilitating role increases so that transit also becomes part of the supporting services for government. It does this by:

- Making the NCR as accessible as possible for all citizens, visitors and tourists, in and between Ottawa and Gatineau
- Providing choices in mode of transportation
- Improving the productivity of the NCR by efficiently getting people to their desired destinations during peak periods and during the midday
- Helping to manage city challenges such as congestion, air and noise pollution
- Contributing to a more livable NCR by facilitating public and social space
- Contributing to a more competitive NCR by showcasing a modern rapid transit technology that improves the image of the area
- Facilitating the development of civic and other regeneration sites by providing good transportation options
- Encouraging environmental sustainability, economic competitiveness, and improving the quality of life for residents, workers and visitors



How will the Interprovincial Transit Strategy help?

The Interprovincial Transit Strategy aims at developing a model of sustainable mobility that will help integrate the core areas of Ottawa and Gatineau. The Strategy includes the following key vision statements to achieve this goal:

The Strategy Vision

- Create a well-planned and integrated land use model for the NCR that is supported by transit and contributes to the image of the Capital Region
- Ensure the system will contribute to the local economy of Gatineau and Ottawa and support the attractiveness of the cities to visitors
- Develop an interprovincial transit system that is seamless, easy to use, accessible and compatible
- Plan and build modern and green infrastructure that will support increases in ridership and fulfill transportation needs in the long term
- Enhance the partnership among agencies to facilitate the provision of interprovincial transit services and infrastructure

The Strategy was developed through a number of consultation activities and technical analysis of the current conditions and proposed opportunities for future improvement. Public engagement with, and input from, the public, and stakeholders was sought during the four phases of consultation to guide and support the Strategy recommendations.

The Strategy incorporates new ideas and best practices to bring together a plan of action for interprovincial mobility. The end result will be a system of interprovincial transit service that meets the needs of the residents, businesses and tourists of Canada's Capital Region to the year 2031.





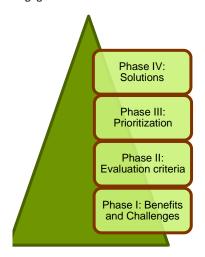
ENGAGING THE COMMUNITY

Developing a comprehensive plan to create an interprovincial transit strategy includes an all-encompassing consultation and communications effort. In-depth consultation has been a vital component of this project, incorporating a comprehensive and proactive approach to reach affected communities and businesses, transit customers, agencies, and the public. The approach places an emphasis on true and meaningful consultation giving equal weight to the stakeholders of Ottawa and Gatineau throughout the life of the project and is in keeping with the NCC's commitment to openness and transparency.

The program was designed to inform the broadest public possible, engage them in the process, listen to them, incorporate their input and build consensus around a common vision and key options for the Strategy. The results of the consultation have been incorporated into the development of the solutions and action plan, as all activities were designed to encourage and welcome a meaningful exchange of ideas and input to truly influence the decision-making process.

Four phases of public consultation were conducted, each with a specific theme and mandate to solicit input at each particular phase of the study. The consultation program also included a workshop with an international panel of transit professionals. Detailed descriptions of the consultation activities can be found in the *Supporting Materials – Consultation Reports*.

Figure 3: The four phases of public engagement



International Panel Workshop

As part of the consultation process, an international panel of transportation professionals was invited to a three day workshop from the 2nd to the 4th of June, 2009, to discuss the issues and challenges with interprovincial transit in the NCR (timed to occur after the first phase of public consultation which solicited input regarding current issues for transit). The panel, as well as study and consultant team members assembled in the Ottawa-Gatineau region for the workshop.

A number of presentations were made from each region and transit agency providing context for the study and background information for all those present at the workshop. These presentations were supplemented by field visits during peak travel times, and walkabouts, providing first hand observations on the interprovincial transit system and the operations of each transit provider in the Region. The three day workshop produced various types of solutions to improve transit related to service planning, and infrastructure but also focused on governance, land use, and how to improve the overall transit service appeal.

During the workshop, the idea of mobility management was brought forth. This concept suggests focusing on a multi-modal transportation system that is user-focused, seamless and value-added. This model will lead to a transit system that is successful as the needs of the user will be accentuated, leading to retention of current riders but also an increase in new riders. The outcome of the workshop was the identification of distinct areas where improvements could be made to improve interprovincial transit. These areas were then further developed through the study to form the various elements of the Strategy.

The details of the workshop can be found in the *Supporting Materials – Consultation Reports*.

Public and Stakeholder Groups

During the consultation process, considerable input was received outlining the elements that the Strategy should include to retain existing transit riders and increase future ridership. Overall, a seamless, easy to use, frequent and reliable service was the most sought after element for the interprovincial transit services. Making the transit user happy and comfortable translates into increased ridership.

Members of Panel

- George Hazel, Scotland
- Neil Cagney, Australia
- Glen R. Leicester, Vancouver
- Jean-François Gysel, Montreal

Study Partners

- NCC
- STO
- City of Ottawa / OC Transpo
- Ville de Gatineau

Study Consultants

- MRC | a member of MMM Group
- AECOM
- PACE
- Urban Strategies



Workshop Sessions

Stakeholder Groups

- Community Organizations
- Business Organizations
- Technical Agencies
- Transit Users & Non-Users

Stakeholder Meetings

- Phase I: April 27 to 30, 2009
- Phase II: June 18, 2009
- Phase III: Feb 16 & 18, 2010

Public Open House #1 (Phase I)

- May 17 and 19, 2009
- Approximately 70 attendees
- "World Café" discussion groups to identify issues and concerns

Public Open House #2 (Phase IV)

- July 6 and 7, 2010
- Approximately 90 attendees
- Comment Kits with questions to confirm and help prioritize Strategy solutions





Public Open House Sessions

CITE – National Capital Chapter (Phase III)

- February 11, 2009
- 42 Transportation expert participants
- Comment Kits with questions to confirm and help prioritize Strategy solutions

Operational service improvements as well as discussions regarding infrastructure were also brought forward during the consultation process. It was stated throughout the consultation process that any infrastructure decision be evaluated based upon it being reasonable, realistic and user-friendly.

The public was very specific about the service improvements required to make the system more appealing and functional. As stated above, an easy to use and reliable service was identified as being critical to creating an attractive transit service. The system also requires reduction in duplication of services and improvements in the off-peak service.

Residents of Ottawa and Gatineau expressed concern regarding the negative impact of transfers on perceived and real transit travel time and its impact on transit ridership. Others noted observations from their transit experiences in other cities, and felt that transfers are not inconvenient when transferring to a reliable, frequent, and comfortable service. Transfers are already being introduced in both Ottawa and Gatineau and will inevitably become increasingly required. It is the quality of the transfer that will need to be improved, particularly the distance between the two major transfer points, as well as better coordinated schedules, maps and fare systems.

The public and stakeholders provided a variety of comments regarding the operation of rapid transit through downtown Ottawa. The majority of respondents indicated a preference for operating an interprovincial LRT through Ottawa's planned tunnel which due to its cost should be used as much as possible. There also is an expectation on the part of the public, that when the tunnel is constructed, the surface will no longer be used for extensive transit service.

The issue of governance was raised throughout the consultation process. Some thought that coordination with regards to regional planning, funding and implementation would be sufficient. However, others were concerned about the potential for too much political involvement and suggested the provision of transit service should be above that. But ultimately, many people in the community stated that a single transit system and authority would be required to reach full efficiency.

Online Consultation

A website has been maintained throughout the study to provide an additional means of public consultation. It includes descriptions of the study background, goals, and process and is updated regularly with project announcements and consultation information. A feedback form was also provided on the website enabling people to directly submit comments to the study team.

www.interprovincial-transit-strategy.ca

www.strategie-transportcollectif-interprovincial.ca



Phase I – Benefits and Challenges

Website Visits: 930 unique visits (from April 29 to May 31, 2009)

22 Submitted Comments

311 responses to Online Questionnaire

Phase II - Evaluation Criteria

Website Visits: 1,942 unique visits (from June 1 to August 17, 2009)

7 Submitted Comments

316 responses to Online Questionnaire

Phase III & IV - Solutions and Prioritization

Website Visits: 623 unique visits (from June 6 to August 9, 2010)

24 Submitted Comments

238 responses to Online Questionnaire

Website Includes:

- Project Updates
- Online Surveys
- Feedback Forms

Activity from May 2009 to August 2010

- 4,343 Visitors
- 6.630 Visits
- 18,078 Pageviews



Mary Mary College



THE FIVE PILLARS OF THE STRATEGY

The Strategy links mobility management principles and policies with specific solutions developed from public engagement and detailed analysis. The proposals and recommendations are presented in Five Pillars, which will work together to bring the region closer to achieving the Strategy vision. The Five Pillars are outlined below:

Transit City Building – Sets out guiding principles for maximizing the contribution of transit to a livable and dynamic Capital, for adoption by relevant agencies

Focusing on the User – Sets out key requirements for seamless, user focused transit, for adoption by both main transit operators, using various short, medium and long term priorities

Operations – Proposes how the two transit networks could work more closely over time, for consideration by all partners, with priority options

Infrastructure – Outlines the various planned infrastructure projects and discusses how to connect rapid transit networks

Governance – Describes various governance arrangements that could be considered for the regions' complex jurisdictional and political environment.

The Pillars were each identified through the consultation program. The panel of international transit professionals helped develop the areas and the public confirmed and helped prioritize each of their solutions. The analysis considered both quantitative aspects such as increased ridership and capacity and qualitative criteria such as rider comfort and the impact to the overall community.

Transit City Building

Focusing on the User

Operations

Infrastructure

Governance

Pillar 1 - Transit City Building

Transit City Building involves using transit to help shape urban development and encourage sustainable transportation. This Pillar summarizes the policies needed to ensure that transit is a key element of the Capital in the future, for consideration by the cities of Ottawa and Gatineau and the NCC.

The recommended principals and policy solutions within this Pillar call for high level planning throughout the entire NCR to be coordinated as one area, with all relevant agencies working collaboratively. New development projects should be located where they can be easily served by fast and efficient transit services, with active and well-designed transfer points that are planned to serve as focal points for the surrounding areas. Parking should be managed in downtown areas through a regional parking strategy. Where possible, people should have a real choice of mobility options, including car, transit, walking and cycling or combinations of any of these modes.

To move the Strategy forward, all land use and transit plans should contain complementary policies. Consistency in policy equals greater success as the Strategy is implemented. This Pillar is an important component to the Strategy as it forms the necessary supportive policy background and direction for the integrated transit solutions that are described in the other Pillars.

There are nine principles that are recommended for this Pillar, each containing a number of policy solutions.

- 1. Plan for the entire region
- 2. Preserve the character of the capital
- 3. Respond to character areas
- 4. Leverage opportunity for transit oriented development
- 5. Use transit as place making
- 6. Emphasize quality and sustainable design
- 7. Enhance mobility choice
- 8. Connect key destinations
- 9. Prioritize pedestrian experience

Each principle is described below, followed by the recommended policy solutions to be implemented. Additional details are included in the *Supporting Materials – Transit City Building Report*.

Gatineau is committed to working to constantly improve the quality of life of residents and the community.

2009-2014 Gatineau Strategic Plan

Épine dorsale du développement, le transport est vital au bon fonctionnement de la communauté.

2005-2015 STO Strategic Plan

Such an ambitious [mode share] objective requires the City to improve transit's competitive position relative to the automobile. To make transit the preferred choice of even more residents, the City must make a deliberate series of improvements to the transit system as well as to the community's broader physical, social and economic context.

2008 Ottawa Transportation Master Plan



Development Areas in Hull Source: Ville de Gatineau Website





Symbolic Character of the Capital



"Complete Streets"



Mixed Use & Transit Oriented Development

Plan for the entire region, not separate cities

Each jurisdiction (the NCC, City of Ottawa and Ville de Gatineau) has their own vision for land use and transportation planning. However, each has developed similar principles, which include sustainable development, enhancement of green space and sustainable mobility. Therefore, it is necessary that the three jurisdictions coordinate their planning policy and activities with each other to plan for the entire region.

Preserve and enrich the symbolic character of the Capital

The NCR occupies a unique place in Canada, serving as the seat for the Federal Government, enjoying connections to nature and being the geographic link between English and French Canada. Through this Strategy, there will be the opportunity to incorporate the Capital's and Canada's unique heritage into the transportation system and the design of stations to reflect this unique circumstance.

Respond sensitively to character areas, neighbourhoods and streets

The cities of Ottawa and Gatineau are comprised of unique streets and neighbourhoods, all of which feature different scales of development, varying uses and distinct communities. The adoption of this principal will therefore respond sensitively to the unique nature of each community to ensure that transit stations and streetscaping initiatives (to name a few) blend in with the existing urban fabric.

Leverage opportunity for transit-supportive development

The introduction of new transit infrastructure can attract high-valued and higher density, mixed use development to the area which, in turn encourages and supports transit ridership. This principal is designed to capitalize on transit and encourage transit-supportive development to occur throughout the NCR.

Use transit as place making

Transit is an identifiable element in the NCR, with the presence of two transit providers, STO and OC Transpo. It is important that this principal capitalize on this element so that transit can be incorporated into the development of attractive and lively places that will attract people to those areas.

Emphasize quality and sustainable design

Good design is one of the foundations of a successful transportation system that is seen as reliable, convenient, easy to use, accessible, and, will provide an overall good experience for riders. Policy solutions suggest incorporating high quality design into the development of the transit system to encourage its use.

Enhance mobility choice

Transportation is responsible for a large percentage of the greenhouse gas emissions, particularly given the number of single occupant vehicle trips that occur in the NCR. However, this principal discusses providing attractive alternatives to single occupant vehicle trips and therefore encourages a balanced transportation system that includes the use of public transit and active modes, such as cycling and walking.

Connect key destinations and diversify ways to get there

There are a number of key destinations in the NCR, including tourist attractions, employment sites, national museums and cultural facilities. A successful public transit system incorporates these significant destinations as well as providing for the means to travel to them through sustainable modes (such as walking, cycling, transit and ride sharing). Given the significance of connecting to key destinations and the need to link to other sustainable modes, solutions were identified to ensure that these connections are easy, convenient and user-focused.

Prioritize the pedestrian experience

Walking is the primary means by which passengers access public transit. It is very important to develop stops and station areas that will prioritize the pedestrian experience through safe, comfortable and easy connections for passengers.

The table on the following pages provides details about the recommended policy solutions for each principle that will lead to better integration of transportation and land use planning across the region.



Transit as Place Making



Attractive and Accessible Design



Mobility Choice



Prioritize Pedestrians

Figure 4: Transit City Building Principles

Plan for the entire region, not separate cities

- Establish a coordinating tripartite body to oversee and manage all aspects of the planning, design and implementation of the Interprovincial Transit Strategy
- Assess current capacity on local transportation systems and integrate within a broader urban planning framework
- Conduct neighbourhood and property analyses to locate the most appropriate sites for transit stops
- Inventory opportunities for carefully managed regional urban growth to occur along public transportation corridors
- Develop a branding strategy to promote the regional nature of the transportation network

Preserve and enrich the symbolic character of the Capital

- Promote the Capital's unique heritage features in connection with its transportation system
- Incorporate into the design of transit stations public art that tells the story of Canada's unique history
- Draft guidelines and criteria for station design that are sensitive and complementary to the symbolic nature of the Capital
- Design a branding and marketing strategy that celebrates the symbolic nature of the Interprovincial Transit system

Respond sensitively to character areas, neighbourhoods and streets

- Incorporate local scale and character into the design of transit stations and stops
- Incorporate public art that is well-integrated into the system, to give a sense of community and consider the unique character of its location
- Develop public engagement strategies to involve the community in the design of the system
- Ensure that streetscape improvements align with rapid transit and other community improvements
- Ensure the transit system and related development are compatible with and sensitive to local heritage
- Ensure seamless integration of all aspects of the system that balances all transportation modes and creates "complete streets"
- Promote systems that are adaptable by recognizing that there is no one-approach-fits-all solution
- Encourage opportunities to display and celebrate the many cultures, identities, and stories that make up the history and identity of the region's neighbourhoods through place-making and design strategies

Leverage opportunity for transit-supportive development

- Strategically locate stations and stops in areas of potential development or where existing development is already transit-supportive
- Ensure that station sites are designed to capitalize on development
- Work toward creating Station Area Plans that ensure a coordinated approach to maximizing opportunities for transit-supportive development
- Establish a Parking Management Strategy to limit surface parking along transit corridors and maximize land development to support transit
- Seek alternative parking standards and shared parking options to encourage transit ridership
- Ensure active ground floor uses in transit-related developments are incorporated into design plans
- Focus taller and denser mixed-use development on or around new transit stations, and ensure that future development encourages connections to the surrounding community

Use transit as place-making

- Ensure that station site selection and alignments are positioned to permit development
- Encourage mixed-use living throughout the Region
- Consider a downtown circulator and ensure it is designed with a branding and marketing strategy to promote sustainability
- Set a tree-planting target that coincides with new transit-oriented development
- Establish pedestrian-oriented design criteria for new developments along main transit corridors
- Create amenities that will attract youth and seniors
- Locate stations and stops in areas of potential development
- Transit stations should include other uses within the facility or surrounding it so that transit places are lively and pleasant places

Emphasize quality and sustainable design

- Create unique identities for destinations throughout the transit network through design
- Consider a coordinated street furniture program for transit shelters and public spaces clustering near transit hubs
- Ensure accessibility is achieved by offering ramps, elevators and other forms of assistance to persons with disabilities
- Incorporate pedestrian and cycling facilities along transit corridors where possible (including bike lanes, bike racks, sidewalks and benches)
- Incorporate the most up-to-date sustainability practices into all aspects of the design, such as encouraging the use of natural light and examining renewable energy options for stations
- Incorporate Crime Prevention Through Environmental Design (CPTED) principles, such as developing well-lit designated waiting areas and pathways to transit stations
- Use high quality, durable materials
- Incorporate public art components that tell the story of the National Capital Region and Canada's unique history

Enhance mobility choice

- Minimize the amount of land dedicated to parking
- Give walking, cycling and public transit priority in the central area
- Encourage and enhance existing unique retail and gallery experiences that promote walkable neighbourhoods through improved signage and pedestrian-supportive urban design
- Implement a pedestrian priority approach for all streetscape plans and station designs
- Ensure multi-modal connections and accessibility at transit stops (e.g. bicycle storage, reserved parking for car-sharing)
- Coordinate bicycle strategies between the cities of Ottawa and Gatineau
- Ensure that a coordinated public realm strategy supports streetscape redevelopment

Connect to key destinations and diversify ways to get there

- Improve way-finding signage along cycling and pedestrian routes
- Encourage direct linkages between transit stations and new development to maximize accessibility and encourage transit use
- Design street and block networks in a manner that provides clear, direct, unobstructed connections to and from transit stations and between other key destination points
- Integrate and connect existing networks

Prioritize pedestrian experience

- Pursue best practices in pedestrian-scale design, including encouraging the development of "complete streets"
- Promote pedestrian priority areas, particularly in areas surrounding transit stations
- Ensure the streetscape surrounding transit stops/stations are designed to support the pedestrian experience
- Implement traffic calming measures to slow vehicular traffic in pedestrian priority areas
- Explore opportunities to implement safe crossing conditions and pedestrian priority infrastructure, such as pedestrian scramble phases at intersections in high pedestrian traffic areas
- Promote interconnectivity that facilitates easy pedestrian access between multiple transit routes
- Ensure an animated street environment through encouraging active building frontages and through other interventions, such as licensing outdoor food vendors. Encourage active use of the spaces around stations through encouraging food vendors.
- Create new public spaces adjacent to transit stations and promote stations as public gathering places that enhance the pedestrian experience
- Establish pedestrian-oriented design criteria for new development along main transit corridors
- Ensure that environmental considerations are incorporated into the design of pedestrian infrastructure, such as incorporating four-season weather protection into the design of pedestrian spaces, and setting tree-planting targets for green pedestrian corridors



Fare Systems



Intelligent Transportation Systems (ITS)



Bicycle Share (BIXI)

Pillar 2 - Focusing on the User

Throughout the consultation with stakeholders and the general public, the terms that were heard most frequently were "seamless", "easy" and "compatible". To ensure that the transit system continues to be successful, the needs of the user plays a leading role in the implementation of the Strategy. Therefore, fare structures, information, and other service delivery standards and policies should be aligned across the NCR so that residents and travelers from both cities are provided and can anticipate similar levels of service.

Technology can now help to ensure that transit services are more responsive to user requirements, providing easy access to information and ticketing options via the web, by smart cards or mobile phones. Joint transit information should be prioritized, with an NCR transit map and journey planner, shared website, and shared marketing.

Public demand has necessitated the need for fast and frequent transit services to popular destinations such as the two downtown cores. To meet this need, transit priority projects will ensure that transit does not get caught in congestion during the peak time periods.

A Transit System is Only Successful if People Want to Use it

The transit user is a significant factor in the development of the Strategy. Therefore, a model that focuses on the needs of the user is needed in the long term to attract more riders to transit.

To meet the needs of the user, seven categories were identified where solutions are proposed related to improving the transit experience.

- 1. Branding
- 2. Communications
- 3. Fares
- 4. Service Reliability
- 5. Accessibility
- 6. Transit Stops and Stations
- 7. Customer Service

These elements are briefly described below. Additional details are included in the *Supporting Materials – Focusing on the User Report*.

The following figure presents solutions for each Focusing on the User category that can be implemented over time. Within each category, the list is presented in order of priority (most important on top) as identified through the consultation process.

Figure 5: Focusing on the User Solutions

Branding

- •NCR Trip Planner (launched Nov 2010)
- •Common Website and NCR Transit Map
- Common brand and format for interprovincial transit information
- Branding of Downtown circulator
- •Single Brand for all bus and light rail services in the NCR

Communications

- One call centre
- •One bus stop phone number and SMS Messaging system
- Single route numbering system

Fares

- •One common smart card system for multiple modes (BIXI, Car-share, Transit)
- Common transit fare system (tickets, passes, cards)
- •Common Sales centres for both OC Transpo and STO
- •Compatible transit smart card systems (Presto & Passe-Partout)
- •Common fare structure and eligibility for discounts

Service Reliability

- •Coordinated schedules at interprovincial transfer points
- Transit priority measures at bottlenecks in the vicinity of the interprovinical bridges

Accessibility

- Common eligibility for Para Transpo and Para Transit services
- •Common wheelchair positions and spaces on transit vehicles
- Align signage, positioning and policies around priority seating
- Full review of accessibility policies to identify and resolve differences

Transit Stops and Stations

- •Common signage standards and information formats
- Common information provided at stops and stations
- •Common system for night stops and emergency call boxes
- Common standards for determining location of stops and stations

Customer Service

- •Bilingual staff knowledgeable about both transit networks
- •Common system for bilingual automated stop announcements
- •Common customer service centres for easy customer feedback



Vehicle Branding



Traffic Control Center



Off board fare payment for multiple modes

Branding

To create the appearance of a single transit system for interprovincial travel, the concept of a single brand for all interprovincial transit services will ultimately be required. This will need to be gradually implemented and should start with integrating all forms of public communication from both STO and OC Transpo. This would include a common website, trip planner (which was launched in November 2010), and transit map (or maps) that are formatted and branded in the same way, as well as common advertisements and printed information. The proposed Downtown Circulator (discussed in the Operations Pillar) should include a vehicle that is distinctive and identifiable and would provide the opportunity to launch a new brand for an integrated interprovincial service.

Communications

Communicating information about interprovincial transit services is needed for the system to be successful. It is important that individual services be interconnected to meet the needs of all users on both sides of the river and visitors to the region. Therefore specific attributes of the communications system need to be addressed to improve the user experience and increase ridership. Such improvements include providing information to make the best use of the system (such as the joint trip planning service) and communicating when and where these services are available. Common layouts for information will also improve communication and is linked to the need for a common brand. In the future, developing a common route numbering system, further integration of information at the call centers, and a common phone number and SMS messaging number that provides access to real-time information will aid the user in navigating the system in a more seamless manner regardless of which city the user is located.

Fares

A common fare structure will make the system more user-friendly. Different fares, policies and media make it difficult to navigate the system, especially for visitors. This will take time to implement. New services, such as the Downtown Circulator may assist in making the transition to a common fare structure. Allowing for fare media to be purchased for either system at each other's information and sales centres would also benefit riders.

Service Reliability

Transit users expect the service to be reliable and when it isn't, they will shift to another mode of transportation. Improving reliability is important for enhancing the rider's experience which will lead to an increase in ridership. To accomplish this, in the short term, there is a need to make connections between routes and systems more convenient through route modifications, coordinated schedules and improved transfer points.

Accessibility

Access to transit service is extremely important to all users, particularly for those who face mobility challenges. Not only is access important but so is having a consistent approach to the policies and eligibility surrounding accessibility. Standards for both STO and OC Transpo should be aligned for both regular and specialized transit services so that people with disabilities are treated in a consistent manner. Aligning signage, positioning and policies around priority seating would be a good first step. Other concerns relate to differences in STO and OC Transpo fares for passengers who are visually impaired as well as the number and location of positions for wheelchairs on buses. A full review of the accessibility policies is required in the short term to identify ways to resolve these differences.

Transit Stops and Stations

Similar standards should be adopted by both STO and OC Transpo during the planning of locations for transit stops and stations to enhance the user experience and improve ridership. Amenities that are provided such as information displays, benches, bike racks and shelters should be provided in a common manner so that is it easier for riders to find their way and understand the services available to them.

Customer Service

Excellent customer service is vital to attracting transit ridership and keeping them. Enhancing bilingual information about the transit network on both sides of the river will make it easier for visitors and infrequent transit users to use the system. Automated bus stop announcements will also aid in keeping transit users informed, particularly for those who are unfamiliar with the system.



Accessible Vehicles



Stations and Amenities



Real-time transit information



Customer Service Centre



Journey Planner at Stations





Car-share Programs

Mobility Management Model

As part of the Focusing on the User Pillar, an integrated mobility management model was discussed by the panel during the international visioning workshop. The international panel suggested a mobility management model that would combine car share, bike share and transit service with a common fare system resulting in a seamless transportation network that goes beyond transit. This could enable the user to select a monthly package that is tailored to their transportation requirements. For example, a transit user could purchase unlimited transit usage and it would include 10 bicycle shares and 5 car-shares to support multi-modal transportation. In the Transit City Building Pillar multi-modal connections are considered and could be further developed by using an integrated mobility management approach. Parking meters and lots could also be included in the system and part of the regional parking strategy. This is something that should be considered for long term implementation.

To ensure that the system will be accessible for all users, there are a number of elements that have been identified for early implementation including an NCR Transit Map, a common website, common layout for public information, call centre, common customer service centres and common eligibility for para Transpo and para transit users. These fit into the existing governance structure and involve a simpler approval process.

The elements listed above are part of a comprehensive approach to improving the interprovincial transit system and making it more appealing to users through sustainable land use planning policies; infrastructure that makes the system more reliable and convenient, and policies to improve consistency between the two service providers. Upon implementation of all the elements listed above, the transit user will experience a system that is seamless, integrated and user-focused.

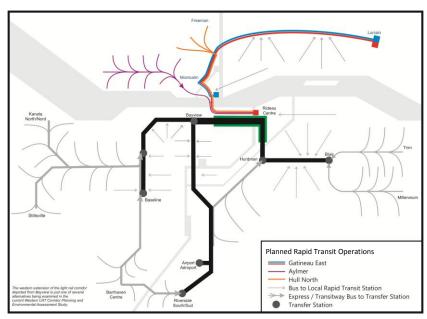
Pillar 3 - Operations

The Operations Pillar focuses on solutions that do not require the construction of physical infrastructure but can improve service efficiency and provide a more integrated transit network. Many of the operational solutions are linked to improving the user experience, as highlighted in the previous Pillar.

Currently STO and OC Transpo services are focused on the downtown cores with a high volume of buses traveling through these areas. During the consultation program, it was perceived that the services are not well-coordinated and suffer from duplication and inefficiencies in route planning. With growing demand, additional congestion on the interprovincial bridges and high traffic volumes in downtown Ottawa will result in impacts to service reliability. The services should be coordinated to appear as one network to reduce these problems, with routes combined where appropriate, thus reducing lay-ups and the need for buses to make empty return trips.

STO is restructuring their transit services with the implementation of the Rapibus which will require passengers to transfer from feeder routes onto the trunk service for access to the core areas. Providing two separate Rapibus routes for destinations in Ottawa and Gatineau will result in a reduction of buses that travel between the two cities.

Figure 6: Planned Rapid Transit Operations



Planned Peak Commuter Service Operations

City of Ottawa / OC Transpo

- Transitway and Express routes feed LRT Stations
- Local routes feed LRT Stations
- LRT provides service to downtown Ottawa

Ville de Gatineau / STO

- Two Rapibus Routes with separate destinations to Ottawa and Gatineau core areas
- Articulated buses on Rapibus routes
- Gatineau sector routes feed Rapibus Stations
- Aylmer and Gatineau North routes continue to travel into downtown Ottawa

The introduction of articulated buses for the Rapibus routes will further reduce the number of bus engines crossing into downtown Ottawa. It should be noted that in the near term, buses that service the Aylmer sector will not be restructured and will continue to travel directly into downtown Ottawa as they do today until such time as a west rapid transit corridor is identified and implemented.

Interprovincial transit services are focused on the commuter peak periods with few services operating during the midday and evening. Considering the many tourist and government destinations within the core area on both sides of the Ottawa River, transit operations could be enhanced to encourage greater transit use during the off-peaks. Services would also benefit from transit priority measures at key congestion points, improving reliability and enabling better service programming. Similarly, all would benefit from an incremental move towards shared service standards and fare policies.

Two different types of solutions were identified for the Operations Pillar and are considered separately in the analysis:

- Operational Policies, and
- Transit Service Modifications.

Below is an overview of the various solutions identified. Further descriptions for each component as well as how they were developed and evaluated can be found in the *Supporting Materials – Operations Report*.

Operational Policies

A number of policies and planning opportunities have been developed separately by each transit agency over time to address their own transit operations. However, due to the nature of two systems operating in the area, there is some duplication of service, and in some cases different operating policies and procedures making it difficult to develop seamless operations between the two transit providers. Other joint transit network improvements are being developed such as reviewing interprovincial services with a view of diverting the 20%-30% of interprovincial transit customers that are non-downtown bound to other non-downtown river crossings. This will further reduce bus volumes on Rideau and Wellington Streets in Ottawa and boulevard Maisonneuve, rue Laurier, and rue Eddy in Gatineau.

Policy Recommendations

- 1. Review interprovincial transit services
- 2. Plan to better coordinate service control
- 3. Plan to improve reliability
- 4. Review service standards and fare policies
- 5. Plan to remove other barriers to joint operations
- 6. Increase surface transit capacity through the core
- 7. Conduct full network review

The following are recommended policy solutions that should be considered in the future to improve the operations of the interprovincial transit system.

Figure 7: Operational Policies

Review Interprovinical Transit Services

- Review of the routing of the interprovincial transit services to simplify the network and to reduce bus volumes in both Ottawa and Gatineau downtowns
- Review scheduling of the interprovincial services with the goal of reducing passenger wait times

Plan to better coordinate service control

- Create compatible radio systems including AVL , communications and dispatch
- Coordinate transit system operations such as location and use of transit priority signals

Plan to improve reliability

- •Shorten some routes and introduce transfers where neccessary and justified without reducing service levels
- •Implement transit priority measures such as queue jump lanes and signals where auto congestion impacts frequent transit services

Review service standards and fare policies

- •Review fare media and structure
- •Ensure consistant service standards and route frequencies
- •Coordinate night stop program and accessibility standards

Plan to remove other barriers to joint operations

- Review jurisdiction of services to allow for better connections of origins and destinations
- •Coordinate and ensure consistency of data collection programs

Increase surface transit capacity through the core

- •Use higher capacity buses such as articulated or double decker buses to accommodate increases in transit demand,
- •Allow buses to operate on additional streets in the core areas

Conduct full network review

- Review entire STO and OC Transpo route structure to better connect passengers' orgins and destinations therby reducing travel times
- Reduce pressure on core area transit infrastructure by ensuring that attractive alternatives exist for non-downtown trips

Brief descriptions of each solution including a summary of the modeling analysis and the impacts and benefits are presented below. Additional details can be found in the *Supporting Materials – Operations Report*.

1. Review Interprovincial Transit Services

A study should be undertaken involving both OC Transpo and STO to identify inefficiencies and duplication of existing services. This could identify opportunities that could be implemented within the current governance systems and policies structure. Two key areas that should be reviewed include routing and scheduling of interprovincial services.

The review of the routing would identify redundancies in the system and result in a simplified transit network that would be more attractive to users. Scheduling of interprovincial services would identify ways to reduce the requirements for lay-ups in the central areas of Ottawa and Gatineau and reduce passenger waiting times at key locations.

Both STO and OC Transpo should actively engage in a route planning process that would reduce the need for non-Ottawa downtown bound Gatineau customers to travel through downtown Ottawa. This could be accomplished by dispersing the transfer points currently located in downtown Ottawa throughout other locations in both Ottawa and Gatineau, and would contribute to the reduction of buses on these streets.

2. Develop a Plan to Better Coordinate Service Control

At the present time, both STO and OC Transpo operate separate control centres for daily operations. While some direct communications exist between the control centres (for emergency purposes), improvements are still required. The compatibility of the two radio systems needs to be improved so that jointly scheduled services can be provided as well as for improving the efficiency of lay-up and recovery times.

Other service control measures include transit priority signals and signal priority measures which are implemented and monitored within each municipal jurisdiction with little communications between the two. Working together could improve transit operations for both systems.

3. Develop a Plan to Improve Reliability

A study should be initiated to investigate the possibilities of making the speed of transit more competitive with the speed of automobiles and to reduce the variability in bus running times. This would identify opportunities to make the transit service more reliable and attract more new passengers.

The study should include a review of end of line recovery time; transit priority measures, shortening routes and introducing more transfers where necessary and justified without reducing service levels. This study should be combined with the review of interprovincial transit services and improved coordination of service control to maximize the improvements in service reliability.

4. Review Service Standards and Fare Policies

A review of the service standards and fare policies for both STO and OC Transpo should also be conducted with the goal of harmonizing as may service standards and fare policies as possible in the short term.

Harmonization of hours of service, minimum service frequencies, transfer policies, night stop programs, services for people with disabilities as well as developing common fare structure policies are among some of the possible changes that can make the system more user friendly and attract more passengers. The simplification of service standards and fare policies for interprovincial trips and services will result in an easier system to use and will lead to more interprovincial trips being taken by transit.

5. Develop a Plan to Remove Other Barriers to Joint Operations

At the present time there are barriers to joint planning, scheduling and service operations. These barriers include incompatible scheduling and data collection systems which restrict the ability to operate as a single identity. As well, limits on jurisdiction regarding where interprovincial services could operate constrain the region's ability to plan for growth. The benefit to developing this plan is that it will enable the streamlining of services, can better connect non-downtown interprovincial trips, and reduce the pressures on the core area.

6. Increase Surface Transit Capacity through Core Area

One of the issues that have been identified is the high volume of buses on surface streets throughout Ottawa's core area. Examination of potential solutions is required to best accommodate the increasing number of buses, including using higher capacity vehicles or reconsidering which streets in the core area should be used for transit.

Implementation of new subterranean LRT infrastructure in downtown Ottawa will reduce the existing volume of core area buses on Albert and Slater Streets. Interprovincial services will continue to operate through the downtown. Using higher capacity buses would result in less transit

2012 Transit Fare Structure

OC Transpo \$1.30 per ticket
 Child \$1.60 / 1 ticket
 Regular \$3.25 / 2 tickets
 Express \$4.25 / 3 tickets

• Rural \$5.25 / 4 tickets

• O-Train \$2.85

STO Adult ticket \$3.05 Student/senior \$2.30

Regular \$3.55 / 1 ticket
 Express 1 ticket + 50¢

• Interzone \$6.10 / 2 tickets



Double Decker Buses



Articulated Buses

7.

eastbound in the AM and westbound in the PM.

Conduct a Full Network Review

If the entire region was operated as a single transit service, the transit network may look different, with origins and destinations better connected and less focused on the urban core. Despite good performance during peak times for both transit services in the core area, non-downtown trips and off-peak travel could benefit from better connectivity.

vehicles in the core but could reduce frequency and increase wait times for passengers. STO could use other streets in downtown Ottawa to make transit services more efficient in the core area. There is also the potential to operate in both directions in downtown Ottawa instead of

Therefore a full network review would take into account a wide-ranging view of both STO and OC Transpo services to determine what efficiencies could be realized through better coordinating and scheduling of services as one network. This work could not take place until the previously mentioned work has been completed as a review of the interprovincial services needs to take place, a plan to improve service standards and reliability must be completed, fare policies and structures need to be streamlined and a plan to remove barriers to joint operations must have been completed.

Transit Service Modifications

Improving interprovincial transit service operations can result in significant benefits such as improving service efficiency, reliability, and ridership. A key element is maximizing services on non-downtown bridges to relieve dependence on core area infrastructure. Service modifications can also be considered to provide additional transit priority and enhance transit attractiveness during both peak periods and during the midday.

A technical analysis was undertaken to provide additional insight as to the potential impacts of the proposed solutions. Their benefits and impacts were assessed in determining if they should be included as part of the Strategy.

Transit Service Modifications

- 1. Reserved transit lane through core area
- 2. Maximize use of the Champlain Bridge for transit
- 3. New interprovincial "downtown circulator " route
- 4. Use of planned east end bridge for transit

The following transit service modifications are solutions that should be considered in the future.

Figure 8: Transit Service Modifications

Reserved transit lane through Core Area

- Existing lanes on boulevard Mainsoneuve; planned lanes on boulevard des Allumetieres; mixed traffic for STO in downtown Ottawa
- •Consider enhanced transit priority from the Montcalm Rapibus Station in Gatineau to the Rideau Centre in Ottawa connecting rapid transit networks;

Maximize use of the Champlain Bridge for transit

- •Champlain bridge has a reversable median transit/HOV lane serving Gatineau based traffic flows
- Routes could connect to Ottawa's LRT network at Tunney's Pasture and can better connect non-downtown destinations with an agreement to use the Ottawa River Parkway for transit

New interprovinical downtown circulator

•Operate a frequent transit route that circulates between core areas connecting major destinations using a modern special purpose vehicles and/or appropriate branding to ensure service is easy to identify

Use of planned east end bridge for transit

- •NCC interprovincial crossing EA Phase I suggests a future river crossing in the east connecting Highway 417 to Autoroute 50
- •A transit service should operate on the bridge connecting rapid transit stations on both sides of the river

Brief descriptions of each solution including a summary of the modeling analysis and the impacts and benefits are presented below. Additional details can be found in the *Supporting Materials – Operations Report*.



Existing Core Area Transit Exclusivity



STO via the Portage Bridge



Portage Bridge

1. Reserved Transit Lanes through Core Area

The planned transit network for STO services includes the operation of buses on surface streets from the Montcalm Rapibus Station, through downtown Gatineau and into downtown Ottawa. Reserved transit/HOV lanes are provided on boulevard Maisonneuve and on the Portage Bridge. Transit operations could be enhanced with the provision of additional exclusivity for transit vehicles through the downtown area by designating additional lanes for transit. Transit lanes are planned for Boulevard des Allumettières, however additional priority can be provided on rue Montcalm, and existing HOV lanes could be designated for transit only. In Ottawa, Wellington Street could include transit lanes connecting the reserved lanes on the Portage Bridge to the lanes on Rideau Street east of Sussex Drive.

Additional reserved lanes for transit in the core area can improve transit service reliability and can also better accommodate future growth as transit lanes generally can carry more people than traffic lanes. This solution can be implemented with little cost and does not require significant planning and maintenance. It can be implemented within the current governance systems and policies within the region in the short term.

2. Maximize use of Champlain Bridge for Transit

The Champlain Bridge connects Boulevard Alexandre-Taché in Aylmer to the Ottawa River Parkway. The bridge is currently configured with one lane for automobile traffic in each direction, bicycle lanes and a reversible median lane. The median lane operates inbound to Ottawa during the AM peak travel period and outbound to Gatineau during the PM peak travel period and is reserved for HOV/transit vehicles.

Maximizing the use of this interprovincial bridge can provide an alternative for downtown destined trips by providing seamless transfers to Ottawa's LRT system at Tunney's Pasture. This can help reduce the volume of passengers that cross the Ottawa River in the core area prolonging the need for additional downtown transit capacity. Also, with a future west rapid transit corridor, it is important to ensure that there are good connections between Ottawa's and Gatineau's rapid transit facilities providing enhanced network connectivity.

Routes could also serve other key destinations once barriers between systems are eliminated. With the RCMP, DND and other government departments relocating their office to locations outside the core, it will become increasingly important to provide transit connections that can allow passengers to bypass the congested core area. This would be beneficial to the residents of Aylmer traveling to the western parts of Ottawa and vice versa. This solution would therefore require an agreement with the NCC to allow continued use of the Ottawa River Parkway for transit (short and long term).

Overall there are many benefits to increasing the use of the Champlain Bridge including reduced travel times, improved efficiencies, low environmental and economic impacts, and a reduction in the number of buses downtown. Reducing the number of buses in the downtown core area contributes to an overall improvement to the area and contributes to the image of the capital city. Reorganizing bus routes to use the Champlain Bridge can also benefit transit-oriented development in the west, particularly around Tunney's Pasture and Westboro.

This solution can be implemented with little cost and does not require significant planning and maintenance. It can be implemented within the current governance systems and policies within the region in the short term. Should the jurisdictional barriers to operation be removed, routes could travel further to other destinations in Ottawa.

3. New Interprovincial Downtown Circulator

As the cities continue to grow, it is necessary to move the transit system towards a more user-focused service. This includes the creation of a downtown circulator, a public transportation service traveling through both downtown cores. The aim of the service is to provide easy access to key destinations throughout the downtown cores that can meet the off peak travel needs of the worker, the tourist and the resident.

The loop is a complementary service to the commuting services that bring workers into the cores for work. As Canada's capital, there are many national tourist sites, museums and government offices in the downtown cores of both Ottawa and Gatineau.





Champlain Bridge



Proposed "Downtown Circulator" route



Ecolobus (Quebec City)



Chaudière Bridge



War Museum



Alexandra Bridge

The downtown circulator, as proposed would travel through the two core areas along Wellington Street in Ottawa, across the Chaudière and Alexandra Bridges and along Rue Laurier in Gatineau, connecting to major destinations along the route. Although this will primarily be designed for trips during non-peak travel times, it could still provide additional benefits during the peak periods, especially as the number of people living and working in the core areas increases.

The technology selected will also be important to the success of the downtown circulator service. High quality, environmentally friendly vehicles with unique branding that can evolve with time will be attractive to all users and easy for visitors to identify.

In evaluating the significance of this service to the delivery of an improved interprovincial transit system, the following can be highlighted:

- It contributes to the overall planning vision for the capital, in particular this will be a high profile service
- It will contribute to the benefits for the users in that travel times can be reduced, it could be operated at frequent headways throughout the day and will be easy for anyone to use
- There will be benefits to the community in that it will be beneficial to the planned developments in the core area (LeBreton and Montcalm) with the simplification of transit and the attractiveness of the special purpose vehicles
- There will be no need to build any additional infrastructure to support these vehicles.

Changes to governance, funding and operational policies and procedures must be considered. As well, there will be a significant outlay in capital costs to get this service underway, including vehicles, signage, maps and marketing. An interprovincial transit loop service has been implemented in the past called "VISIBUS" as a trial and was able to overcome some of these challenges at that time. The service was eliminated due to lack of funding and insufficient marketing to residents as it focused solely on tourism.

Operating a new interprovincial "downtown circulator" route would link all the main attractions for visitors (museums, Parliament Hill and the Market, etc.) as well as several government buildings and is an important element of the strategy to improve midday services and enhance the image of the Capital area. It is important that this route be operated on a frequent basis, including during off-peak hours, to be an interesting

alternative to taxis and personal automobiles, both for visitors and government employees going to meetings.

At first, the "downtown circulator" could consist in a two-way mini bus route, possibly using green technology, such as the *Ecolobus* in Quebec City. Then it could start circulating on reserved lanes and eventually use higher capacity vehicles.

4. Use of Planned East-end Bridge for Transit

The National Capital Commission is studying the appropriate location for a new Interprovincial river crossing in the east-end. This Strategy is intended to improve interprovincial transit and therefore this solution is based on the idea that bridges that cross the Ottawa River should be better utilized by transit. Both the location and the design of the east-end bridge will have significant impact on interprovincial transit ridership and transit modal share.

<u>Bridge location:</u> The ongoing Interprovincial Crossings EA is evaluating three potential corridors for crossing the river. All three potential corridors are east of downtown. As the potential bridge location is moved further to the east, its potential to attract transit riders' decreases.

<u>Bridge design:</u> The east end bridge will provide shorter travel times between the east parts of Gatineau secteur and Ottawa downtown and east Ottawa. Thus the east end bridge will attract significant demand, both car and transit trips. The number of transit trips and the transit modal share will be determined by the configuration of the bridge and connecting roadways in addition to the location. The configuration of these roadways (e.g. number of mixed flow lanes and the existence of a bus lane) will have significant impact on the attractiveness of transit. Transit lanes minimize the impact of congestion delay on transit service. However, the potential to provide bus lanes varies depending on the location of the east-end bridge.

Service should be provided between rapid transit stations on both sides of the river enhancing overall network connectivity and serving key development areas within the corridor. Overall, an east-end bridge is a key component to the interprovincial transit network as it reduces the dependence on the downtown core for transit, thereby reducing the potential number of buses in the cores and better connecting trips through a comprehensive transit network.

Previously Planned Rapid Transit Infrastructure for 2031:

City of Ottawa / OC Transpo

- LRT routes traveling through a Downtown Ottawa Transit Tunnel (DOTT);
- Multiple Transitway corridors/extensions connecting to the LRT routes;
- Various supplementary transit corridors (Transit lanes and Transit Priority measures)
- Local transit routes feeding LRT and Transitway Stations

Ottawa 2008 TMP

Ville de Gatineau / STO

- An exclusive Rapibus Corridor in Gatineau, with buses using HOV lanes to service Downtown Gatineau
- Various HOV lanes connecting into the downtown area.
- Local transit routes feeding the Rapibus Stations

STO Strategic Plan 2005-2015

Pillar 4 - Infrastructure

As well as new services, infrastructure solutions are proposed for connecting the rapid transit networks that are being planned for Ottawa and Gatineau within the 2031 planning timeframe. STO is focusing on the construction of a Bus Rapid Transit (BRT) corridor while the City of Ottawa is planning to convert its BRT corridor to Light Rail Transit (LRT) in the core area. These two different technologies lead to the public perception of two completely separate transit systems in the NCR. The following presents the planned rapid transit infrastructure in 2031 as identified in Ottawa's 2008 TMP and STO's Strategic Plan:

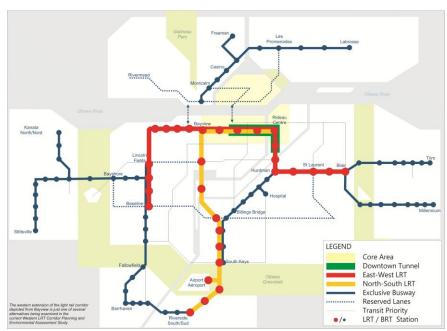


Figure 9: Previously Planned 2031 Rapid Transit Infrastructure

The Infrastructure Pillar explores further potential improvements to transit connectivity that would require the construction of physical infrastructure such as bus lanes, rail tracks, river crossings, and transit stations. The Strategy considers rapid transit infrastructure requirements for the 2031 planning horizon, as well as for the interim 2021 timeframe.

While the planned east-end bridge is included in the 2031 road and transit network, it is not expected to be in operation by the 2021 interim year. Without this bridge, as the population of the NCR grows in coming years there will be additional automobile and transit congestion on existing interprovincial bridges and a high volume of buses in downtown Ottawa.

New infrastructure projects in the next twenty years have the opportunity to better connect the two systems. As the two systems become physically integrated, it follows that the operations and user interfaces with transit would also become more integrated, thus supporting the overall objective of the *Interprovincial Transit Strategy*.

Considerations in connecting the rapid transit facilities include:

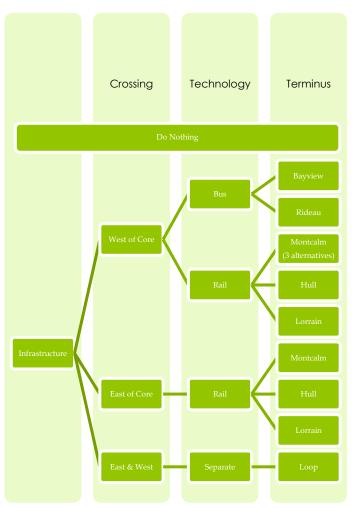
- What technology should be used for interprovincial rapid transit?
- Where should the facility terminate?
- Where should rapid transit cross the Ottawa River?
- How should the facility connect to/through the core?

In order to better understand the implications of different rapid transit solutions, a set of alternatives were developed and simulated using the TRANS travel demand model. This model helps forecast transportation and transit patterns for the 2031 horizon year and is used to quantitatively assess the potential impacts of the different infrastructure alternatives. The planned 2031 road and transit networks, as developed by each city and transit agency, constitutes the base 'do nothing' scenario to which all alternatives are compared.

Through stakeholder feedback, a total of twelve alternative transit scenarios were developed and modeled to quantify the differences in transit demand. Although these scenarios do not encompass every potential future infrastructure alternative in the National Capital Region, the set was developed to provide a robust analysis to distinguish key differences for the interprovincial transit solutions. The infrastructure alternatives were also considered for the interim 2021 year to examine the implications of the infrastructure solutions. These interim year alternatives included only the first phase of LRT in Ottawa from Blair Station to Tunney's Pasture, and did not include the planned east-end bridge.

While the transportation model can help identify changes to transit demand, average transfers and travel times, various other qualitative indicators as identified through the consultation program were considered in the analysis as well. The evaluation of costs was undertaken using typical high-level costs per kilometer. The full evaluation including both qualitative and quantitative factors can be found in the *Supporting Materials – Infrastructure Report*.

Figure 10: Modeled Infrastructure Scenarios



The following describe the recommendations related to infrastructure improvements:

Figure 11: Infrastructure Requirement Principles

Interprovincial Rapid Transit Technology

- A coordinated rail rapid transit technology for the National Capital Region should ultimatly be provided;
- •Strategic transfer stations to facilitate multi-modal transportation should be developed to improve transportation choices and support transit oriented development. These station are important in the interim when there is a mix of rapid transit technologies in the core area; LRT, O-Train and Rapibus.

Interprovinical Rapid Transit Terminus Locations

- A rail facility must be extended far enough into Gatineau so as to minimize the number of additional transfers that will be required.
- •Analysis of various infrastructure scenarios has shown that direct connection of rapid transit between Gatineau and downtown Ottawa has the potential to offer the greatest benefits for ridership and travel time savings. Analysis has also shown that if the direct access is on surface streets it would have a negative impact on the surrounding environment. This impact can be mitigated by converting the large number of express STO services to fewer trunk transit routes.

Interprovincial Rapid Transit River Crossing Location

- •While LRT can be accommodated on both the east and west sides of the cores in the long term, priority should be placed on the western crossing due to the location of multiple existing bridges, better direct connections to the core areas, and minimal impacts to adjacent communities and the environment.
- •Ultimately, 2 rapid transit crossings could be considered, but not as a loop; the crossings could be use for two separate routes providing improved network connectivity for both downtown and non-downtown trips

Interprovincial Rapid Transit Operations Through Downtown Ottawa

•Analysis of infrastructure options has shown that a direct to downtown rapid transit facility between Gatineau and Ottawa using the LRT tunnel is the technically preferred scenario over the long term in contributing to a more cohesive interprovincial transit system. Analysis has also recognized operational limitations to multiple line light rail capacity of the Ottawa LRT tunnel that would necessitate the accommodation of Gatineau rapid transit through transfers or operation on surface streets in downtown Ottawa.

Brief descriptions of each solution including a summary of the modeling analysis and the impacts and benefits are presented below. Additional details can be found in the *Supporting Materials – Infrastructure Report*.

Interprovincial Rapid Transit Technology

Rapid transit technologies currently planned in the region include BRT and LRT. In general, the alternatives that have been considered include an extension of Rapibus service to Ottawa, and an extension of LRT to Gatineau. An additional alternative considered a separate rapid transit technology for the core area.

Following the construction of the downtown transit tunnel in Ottawa, the City plans to make Albert Street and Slater Street (the existing Central Transitway) more pedestrian and bicycle friendly and encourage more ground-level activity. As such, these two streets are not intended to provide the same transit capacity as they do today. Also, operating STO buses on Rideau Street and Wellington Street as they do today, would impact the image of the capital with buses traveling in front of the Canadian Parliament Buildings and other major historic sites. A bus solution therefore might not be appropriate considering the increase in transit demand and the NCC's vision for the Capital experience.

The analysis that was undertaken identified that a rail solution could be more beneficial than the bus solution, but required the rail facility to extend far enough into Gatineau so as to minimize the number of additional transfers. In general, the rail solution would result in a reduction in travel times, an increase in transit ridership, and a more comfortable and identifiable facility for passengers.

A separate rapid transit facility connecting the Rapibus to the Ottawa LRT would result in a reduction in transit demand as it would require all interprovincial transit passengers to transfer onto this facility for access to the core area and an additional transfer if traveling beyond the core. A separate technology would also require a maintenance and storage facility which would add significant capital costs.

Considering that the Transitway, now in operation for 25 years, has reached its capacity and is being converted to LRT, and considering the capacity constraints on the Rapibus being constructed (single lane over Gatineau River, At-grade crossings) it can be foreseen that a rail technology would be required in Gatineau within the planning horizon. Ultimately, a coordinated rail technology for the NCR should be considered.

With multiple rapid transit technologies currently being constructed in the core area, it is important to ensure good connections between facilities. Providing a passenger with route options using simple transfer stations are beneficial to enhance network connectivity and route alternatives. These facilities must be well designed to ensure a seamless and comfortable transfer for passengers and support transit-oriented development. The stations would also function as mobility hubs in the core area with access to multiple modes including local transit services, taxis, bike-share, and car-share services.

Terminus Location (transfers / direct)

The analysis of alternative terminus locations considered various options in both Ottawa and Gatineau. In Gatineau, the extension of LRT considered three alternative terminus locations; the Montcalm Rapibus Station, downtown Gatineau (Hull) or replacing the Rapibus with the interprovincial LRT (terminus at Lorrain Station). The analysis indicated that the extension of LRT to Lorrain Station provided significantly more benefit than the other alternatives as both Montcalm Station and Hull would require an additional transfer for interprovincial passengers from Gatineau. An extension to Hull benefited Ottawa residents as it directly connects to the Gatineau core enhancing network connectivity, and providing a key transit hub.

In Ottawa, options that brought a rapid transit facility from Gatineau to Ottawa considered a terminus at Bayview Station or the Rideau Centre. The main difference between these options is that one would require passengers to transfer onto the Ottawa LRT while the other would provide a direct service through the core area. It is expected that there will be adequate capacity on the planned Ottawa LRT to accommodate all Ottawa and Gatineau transit passenger demand.

While analysis of infrastructure options has shown that a direct connection between Gatineau rapid transit and Ottawa's downtown LRT tunnel has the potential to contribute most to a more cohesive interprovincial rapid transit system in the long term, downtown Ottawa LRT operational controls and downtown urban design policy factors make a certain choice premature at this time. This will necessitate a collaborative investigation of opportunities to achieve seamless rapid transit integration in the longer term through technology innovation, signaling advancements, service reliability improvements, convenience in transfers and approaches to balancing mobility in the Capital core.

Until such time when a coordinated rail rapid transit facility is implemented for the NCR, buses can be reduced in the downtown cores by increasing the number of transfers. This can have a negative impact on transit ridership therefore the Strategy attempts to provide a compromise by increasing the ability to make transfers while maintaining service levels. OC Transpo is currently introducing transfers as the transit vehicle capacity in the Ottawa core has been reached. Passengers are transferring to higher capacity vehicles that are being used to accommodate the increasing transit demand through the core areas. As well, an additional transfer is being introduced for STO passengers as part of the trunk and feeder system associated with Rapibus. This will reduce the number of buses in the core area while simplifying peak operations and minimizing passenger waiting times on congested downtown streets.

The Strategy also identifies the potential to transfer onto non-downtown services that cross the Champlain and east-end bridge. This could improve some passenger's travel times, reduce the core area transit congestion, and provide improved network connectivity. Additionally, it would result in a reduction of core area transit demand and therefore minimize the number of buses in the core. Further reductions in buses to serve the core area could be achieved in the interim through an extension of the Ottawa rail network to Gatineau providing additional transit alternatives for non-downtown trips. While it would not accommodate all the interprovincial transit demand, it could help improve core area service.

River Crossing Location

Rapid transit river crossings were considered on the east and/or west side of the core area, generally using existing bridges. It is possible to construct a tunnel under the Ottawa River which would be more centrally located but this would not be justified considering the volume of interprovincial passengers and that there is adequate surface capacity on the existing five core areas bridges to accommodate the forecast interprovincial transit and traffic demand.

There is ridership and travel time savings associated with a western crossing (especially for Gatineau residents) and it can provide operational flexibility with possible connections to the North-South LRT and the downtown Ottawa transit tunnel. A western crossing can build upon existing infrastructure, can encourage current and growing core area development and could be better coordinated with other transit infrastructure projects. A

west crossing could also provide interim benefits with an extension of the Ottawa O-train but this facility could not accommodate all the forecast interprovincial transit demand. This crossing would have fewer impacts to the environment and to the community as it would avoid already developed areas.

Light rail transit crossings on both the east and west sides of the downtown cores should be sought in the long-term, but not necessarily as a rapid transit loop. A second rapid transit crossing could be used for a separate route to provide additional transit capacity and network connectivity. For example, a future east crossing could be considered in conjunction with a future West Gatineau rapid transit facility.

Operation through downtown Ottawa

It will likely be many years before an interprovincial rail facility is considered to support the majority of interprovincial transit demand. When the decision is made to undertake this endeavor, the following factors need to be considered:

- The best route through downtown Gatineau for the rail rapid transit service has not been studied at this time. Alternative routes using the current rail corridor, existing streets, or other grade separated options are all possible and would need to be examined at the appropriate time.
- There are options for how the Gatineau rail rapid transit service might cross the Ottawa River. The route of the service through downtown Gatineau will influence this. Depending on the option chosen, passengers might have direct pedestrian access to large parts of downtown Ottawa, or they might have to transfer to the Ottawa LRT service in the tunnel.
- The rail technology available may well evolve over the next ten to twenty years and provide new options for consideration.
- While the Ottawa downtown tunnel can accommodate all of the expected passenger demand, it cannot accommodate multiple rail lines in its current form. More advanced signaling technology in the future may open up this alternative.
- While there are no plans to accommodate future rapid transit services on surface streets in downtown Ottawa in the future, it is unknown at this time how the situation might evolve between now and the time when focused planning for the Gatineau rail service is underway.

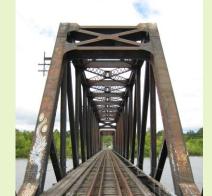
There are a lot of unknowns and much may change in the future. Thus, it is recommended that the decision about how Gatineau rail rapid transit passengers access downtown Ottawa not be made at this time. Rather, the focus should be on the improvements possible in the other Strategy pillars and on ensuring that the eventual system is fast, more reliable and convenient for the users.

It is recommended that current and future studies:

- Do not preclude direct services for a future interprovincial LRT to Ottawa's downtown
- Accommodate transfers between facilities at key mobility hubs.

Additional discussion about interprovincial rapid transit operations through downtown Ottawa are included in the *Supporting Materials – Infrastructure Report*.







Prince of Wales Bridge

O-Train and Prince of Wales Bridge

An extension of the current O-Train across the Prince of Wales Bridge was raised frequently during the various public and stakeholder study meetings. The O-Train does not have the capacity to accommodate all of the interprovincial transit demand, and it would not encourage significant growth in demand because of the additional transfers that such an arrangement would cause. In spite of this, the O-Train does have a role to play in contributing to meeting future demand.

If the O-Train was extended across the Bridge to either the Hull core or the Montcalm Rapibus Station, it would enhance network connectivity and/or minimize transfers for interprovincial passengers traveling between Gatineau and west or south Ottawa. Making this connection prior to 2021 would provide additional transit capacity prior to the introduction of a new east end bridge. Eventually, Ottawa's north-south LRT service could replace the O-Train extension.

Initially the Prince of Wales Bridge's single track would provide sufficient capacity for the O-Train extension, although it will require some refurbishment to meet current standards and codes. While this refurbishment is being undertaken, consideration should be given to incorporating a cantilevered structure from the bridge to accommodate an interprovincial pedestrian and cycling corridor. Future expansion of the bridge to accommodate a second track will be necessary to accommodate a more frequent north-south LRT service.

It should be noted that there are a number of additional challenges that may need to be overcome if the O-Train were to be extended into Quebec as well as in the longer term for enhanced interprovincial rail rapid transit. These include: federal rail regulations, multi-jurisdictional funding, governance, operations and maintenance.

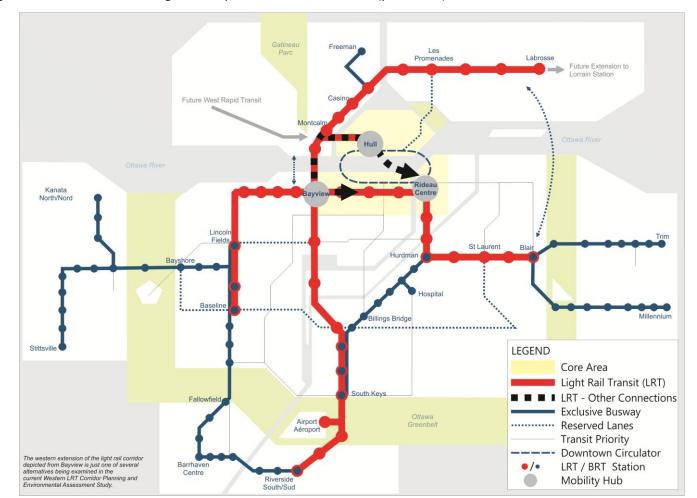


Figure 12: Recommended Long Term Rapid Transit Infrastructure (post-2031)

Operational Services

- Downtown Circulator
- Reserved lanes through core area
- Transit service on east-end Bridge
- Maximize use of Champlain Bridge

Future Projects

- West Gatineau Rapid Transit
- Additional rapid transit river crossing

Infrastructure Projects

- Upgrade O-Train to LRT
- Upgrade Rapibus to LRT
- Mobility Hubs at Hull, Rideau Centre and Bayview

Gatineau's geographic situation as a border town brings it countless unique challenges and opportunities. Applying strong cooperative leadership to issues of shared interest with the National Capital Region, the City of Ottawa and the Outaouais region provides a promising opportunity for strengthening its unification and image.

2009-2014 Gatineau Strategic Plan

"Need for greater cooperation and coordination by all those stakeholders involved in the planning, development and management of the Capital Region transportation systems, infrastructure and services."

A Strategic Transportation Initiative for Canada's Capital Region; NCC, June 2005

Pillar 5 - Governance

This Pillar outlines the existing governance structure, identified issues as well as possible governance models that would be suitable for a multi-jurisdictional region. The primary focus of the Pillar is on improving coordination between OC Transpo and STO.

At the present time, three groups exist in the NCR that work in a collaborative way. At the political level, a tripartite group consisting of the Mayors of Gatineau and Ottawa as well as the Chief Executive Officer (CEO) of the NCC, have met to discuss interprovincial transit, though since STO is a transit commission, the Mayor of Gatineau has little authority compared to the Mayor of Ottawa. The second group looks at the operational and planning issues surrounding interprovincial transit service. This group consists of councilors from each city as well as the general managers from both STO and OC Transpo. Finally, at an operational level, staff from both transit agencies meet from time to time to discuss short term planning and operations issues.

It will be necessary to have collaboration at all levels to ensure the success of the strategy. Various significant options for governance were considered however, radical changes are not short term options, and continuing to work in a cooperative manner will enable many of the solutions within this Strategy to be done in the short term.

The following governance models have been identified:

- One Harmonized Statutory Agency
- Umbrella Agency
- Special Purpose Board
- Contracted Framework
- Voluntary Interprovincial Transit Governance

Each of the possible governance options has been reviewed highlighting both advantages and disadvantages of each. Brief descriptions of each governance model is presented in the figure below followed by explanations of the advantages and disadvantages as well as how they can be applied in the NCR. Details about each model as well as case studies related to other multi-jurisdictional systems can be found in the *Supporting Materials – Governance Report*.

Figure 13: Governance Models

One harmonized statutory authority

- A body established by legislation and/or formal agreement and responsible for some aspect of public transit in the NCR
- Comprised of municipal appointees (but also could include provincial and NCC)

Umbrella Agency

• A body established through legislation or formal binding agreement that oversees existing agencies eithe by controlling/providing funding or holding an approval authority (such as Translink)

Special Purpose Board

• A board that would be set up with a limited mandate for specific project(s) in the transit field.

Contracted Framework

•The parties could negotiate one or more contracts that would cover various aspects of their operations

Voluntary
Interprovincial Transit
Governance

- Various committees are created as required to ensure cooperation and coordination in planning, implementation and operations
- Current groups would fall within this model

The Harmonized Authority and Umbrella Agency are the most effective, but harder to establish. The key difference between the two would be the structure for service delivery. The Harmonized Agency would involve combining the current operations of STO and OC Transpo in a new organization, with all the complications normally associated with an organizational amalgamation – but also all the potential for cost reduction through integration and elimination of duplication. The Umbrella Agency would only see parts of the current operations merged, with the actual service provision remaining with OC Transpo and STO, under the direction of the Umbrella Group. This approach would be easier to establish and would gain many of potential efficiencies, but perhaps not all. The Umbrella Agency might achieve greater savings in the long term, however, by removing the diseconomies of scale and providing an environment where the performance of service delivery agencies can be compared, and if appropriate, competed.











The Statutory Authority and the Umbrella Agency both lack the ability to raise funds, and the potential to have both provinces (and perhaps the federal government) grant taxing authority to a new agency is extremely low. Thus these two approaches would have to be combined with keeping the Cities (and/or provinces) responsible for funding the operations and the infrastructure, which would imply some ability to provide direction on expenditure levels, likely by determining service levels and approving fare levels.

The Special Purpose Board would be easier to set up, but it is not clear what service it might operate today, so it might be limited to a Planning and Infrastructure Development role, at least initially.

The Contracted Framework could certainly achieve much more than the current voluntary approach, but it is not at all clear how an effective contract, covering all the important issues, could be negotiated any more easily than setting up a new agency or commission. However providing some dedicated staffing to the current voluntary bodies with a direction to develop one of the other options for implementation could be a first step.

Selecting a model of governance which is project-specific would be the most appropriate action given the complexities of the administrative structure in the Capital Region which incorporates all three levels of government.

During phase IV of the public consultation program, the strategy team recommended that the Governance Model be reviewed on a project-to-project basis. Most people felt that a single transit system and authority would be required to achieve the desired efficiency in the Region; while some felt additional coordination and cooperation would be sufficient. Some of those favoring one transit authority also made suggestions of which organizations should be represented in the governing body.

Examples of projects and the type of governance structure are described below:

A tripartite planning body including political representation from the City of Ottawa, ville de Gatineau and the NCC to oversee the implementation of the Strategy. A revised mandate will be required but will still be based upon the existing tripartite structure. This body will establish other groups that will be responsible for various components of the plan.

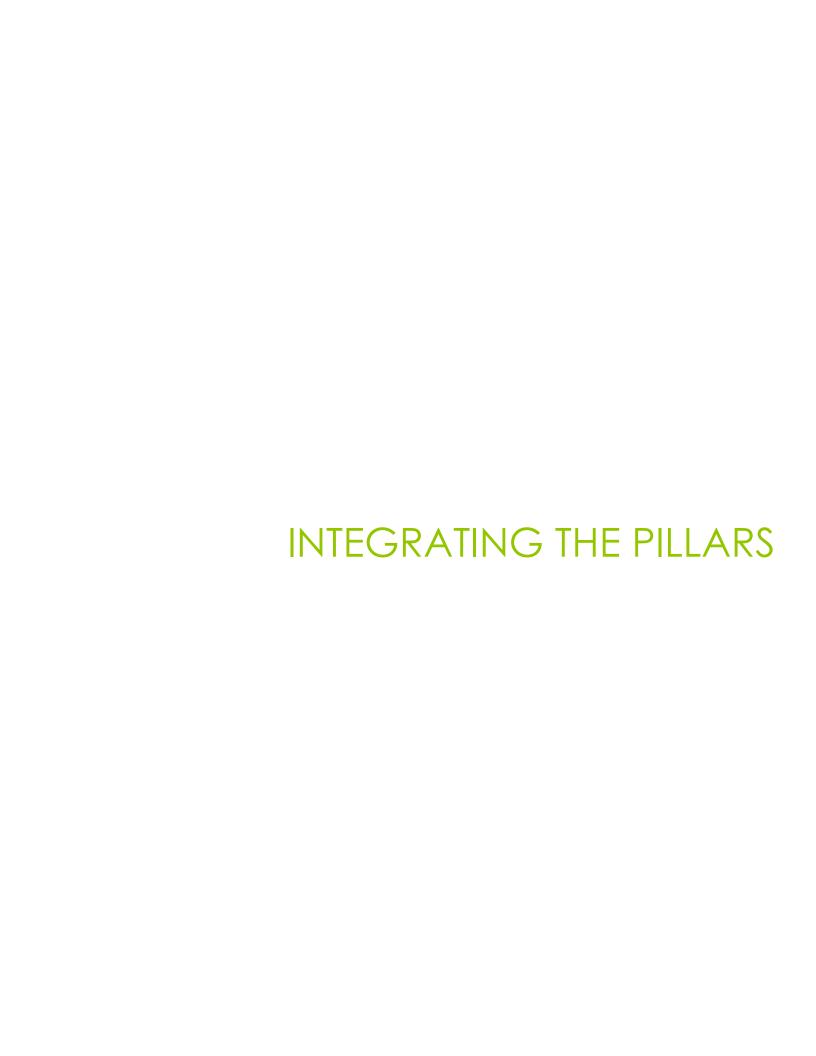
The groups presented below correspond with the special purpose board governance model:

- Joint Advisory and Monitoring Board This board will oversee the implementation of the strategy and will include all relevant partners. Sub-groups will be created to oversee operational implementation and policy and planning implementation, as described below.
- Operations Implementation Group This group consists of both transit operators that
 will ultimately work together to create the appearance of a single transit network
 delivering interprovincial transit services. Examples of the solutions that would be
 included under this group are: review service standards and fare policies, develop a plan
 to remove barriers to joint operations, conduct a full network review, and increase
 surface capacity through the downtown cores.
- Policy and Planning Group This group consists of all agencies working together to create policy that will lead to collaborative planning for the entire region. Examples include the development of a regional parking strategy, creating station area plans, a coordinated public realm strategy and a mobility management plan.
- **Downtown Circulator Board** This board is a separate body that will oversee the operations of the Downtown Circulator. This group will be established prior to the implementation of the service.

Therefore, interim governance solutions are proposed that will provide a basis for moving forward. The immediate recommendation is simple and pragmatic – to set up an Advisory and Monitoring Board at the political level responsible for managing the implementation of this Strategy further encouraging voluntary collaboration at the operational level between the NCC and the City of Ottawa, Ville de Gatineau, STO and OC Transpo. To advance the Strategy, each partner can be responsible for the following:

- The NCC, City of Ottawa and Ville de Gatineau will be responsible for working together on city building, infrastructure and land use planning issues found in the Transit City Building and Infrastructure Pillars.
- OC Transpo and STO will be responsible for working together towards the integrated transit solutions described in the Focusing on the User and Operations Pillars.





INTEGRATING THE PILLARS

To create a sustainable and environmentally-friendly transportation system, the Five Pillars have been developed as integrated elements that will result in a user-focused, seamless and value-added interprovincial transit network. Achieving this will require coordination in the development and implementation of policies, programs and projects related to the interprovincial transit network.

The ultimate goal of this study is an improved interprovincial transit system that is user-friendly, seamless and easy to use by 2031. To achieve this goal, numerous recommendations have been developed within each Pillar. However, they were not developed in isolation of each other as many have overlapping goals and recommendations. This section will outline how the Pillars are connected and where the integration exists.

Each Pillar has a specific role in the Strategy. The Focusing on the User Pillar outlines the elements that should be addressed in order to develop a system in which the needs of transit passengers are met and the ridership can grow. Within the Operations Pillar, the recommended operational policies and transit service modifications are outlined. The Infrastructure Pillar outlines the development of the rapid transit network required by 2021 and 2031. Both the Transit City Building and Governance Pillars contain recommended policy and administrative

initiatives to fulfill the vision for the Strategy and the other three Pillars.

The Operations Pillar which has a significant link to the needs of the user is also highly integrated with the infrastructure components of the Strategy. The recommended changes to transit service operations, particularly the Downtown Circulator, a proposed new service that will circulate through the downtown cores of both Ottawa and Gatineau linking major destinations, will incorporate new infrastructure in the form of modern special purpose vehicles. It will also improve mobility throughout the downtown cores for visitors, workers and resident during non-peak travel times.

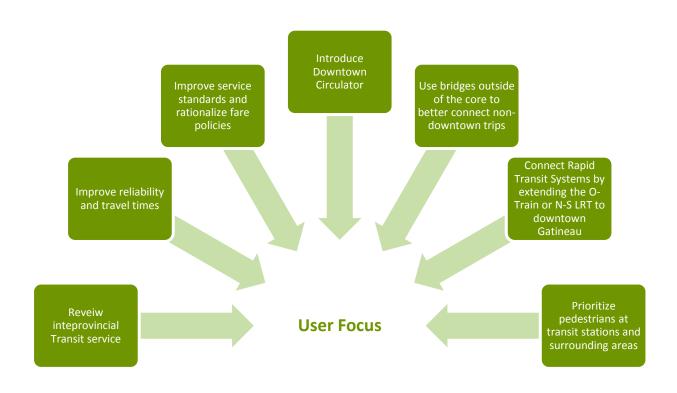
The Transit City Building Pillar is the element that combines all the other Pillars within the Strategy and forms the policy and structure within which the recommendations for the Pillars can be implemented. The principles developed for the Transit City Building Pillar were designed to bring together the various components of the Strategy in such a way that the urban environment would be of high quality and that a regional approach to transit planning would take place. For example, transit has an impact on land uses in an area (such as increases in density as well as more mixed use and pedestrian-friendly development) but the land use policies can influence where the transit network is located as well as how it can be accessed.

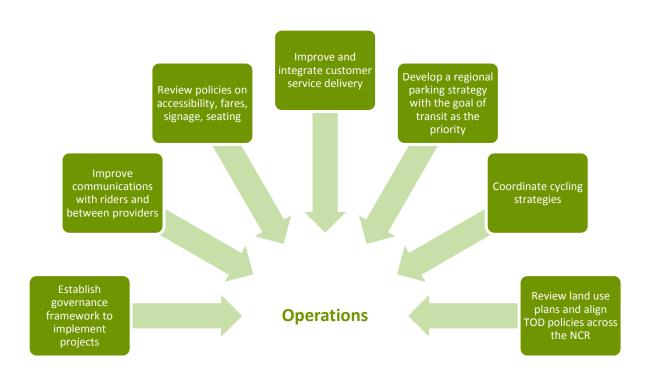
Working collaboratively is required in this region due to the different approaches to transit service delivery on either side of the Ottawa River. Continuing the model of cooperation that currently exists will continue to result in improved operations, complementary land use and transportation policies and a seamless, easy-to-use system for both existing and future transit passengers. However, it must be noted that each project within this Strategy will be reviewed in terms of the appropriate governance model that could be applied for its planning and implementation.

Figure 14 presents how the various solutions for each Pillar are related to each other. The following chapter: Making it Real – Implementing the Strategy includes an Action Plan that outlines the solutions, when they should be implemented and how they can be integrated.

Figure 14: Integrating the Pillars









MAKING IT REAL: IMPLEMENTING THE STRATEGY

MAKING IT REAL: IMPLEMENTING THE STRATEGY

The implementation of the proposed Strategy solutions as described in each of the Five Pillars will together lead to improved transit in the NCR. The solutions contribute to increased transit demand due to improved transit user experience and better connected rapid transit networks while minimizing the volume of buses required through the Ottawa core area and improving the non-motorized transportation and social environment.

There are a number of existing and proposed infrastructure projects that will impact the current transit operations in and through the core areas. (Figure 15) The Operational, Focusing on the User and Transit City Building solutions are to be implemented throughout the planning horizon to supplement the infrastructure projects. They will contribute to improved transit ridership through enhanced user experience and network connectivity. While the infrastructure projects will improve core area transit service, these other solutions will prolong the need for additional core area rapid transit infrastructure by better connecting non-downtown destinations and improving transfers between facilities.

Governance can be addressed separately for each solution. Depending on the solutions being implemented, a specific governance model could be adopted for each based on the level of effort required, funding, and staff resources. Solutions such as providing an integrated trip-planner have been undertaken jointly in the past through voluntary correspondence between service providers. Providing a single integrated website for both OC Transpo

and STO would likely require a special purpose board, or a contracted framework to ensure that both properties are appropriately represented. Similarly, provision of additional transit lanes can be undertaken by each city, but the operation of a downtown circulator route would require funding, operating and maintenance agreements between transit agencies.

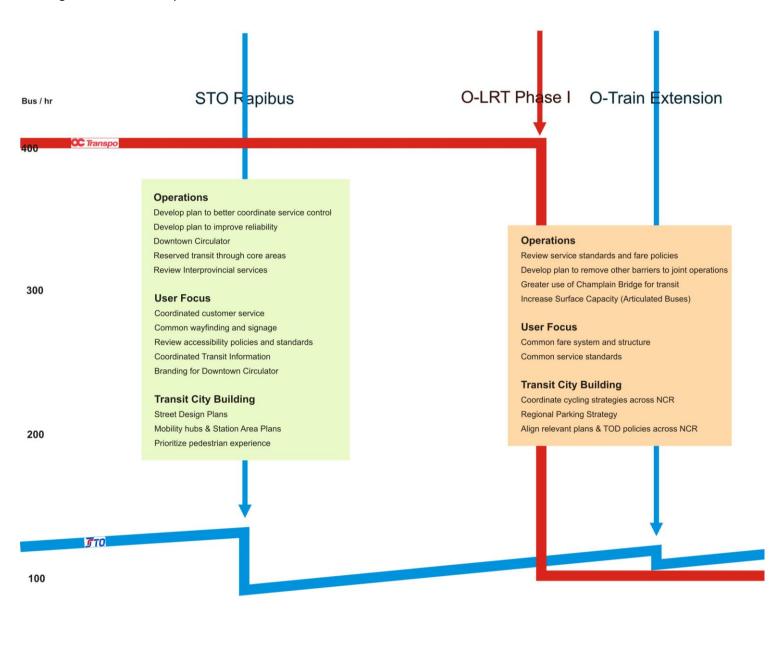
Figure 15: Infrastructure Projects



Figure 16 presents the key infrastructure milestones and indicates the corresponding volume of STO and OC Transpo buses that are forecast to travel through downtown Ottawa during the morning and afternoon peak hours. The figure also presents the timing of Operational, Focusing on the User and Transit City Building solutions that will contribute to increasing transit ridership, improving service integration, and further reducing core areas buses.

The volume of buses being presented for OC Transpo and STO include vehicles that travel on Albert and Slater Streets as well as in both directions on Rideau Street and Wellington Street during the AM peak hour. This includes 180 buses on both Albert and Slater Streets and 40 buses/hr on Rideau and Wellington Streets resulting in a total of 400 buses/hr for OC Transpo while STO operates 120 buses / hr on Rideau Street, Wellington Street, and King Edward Avenue.

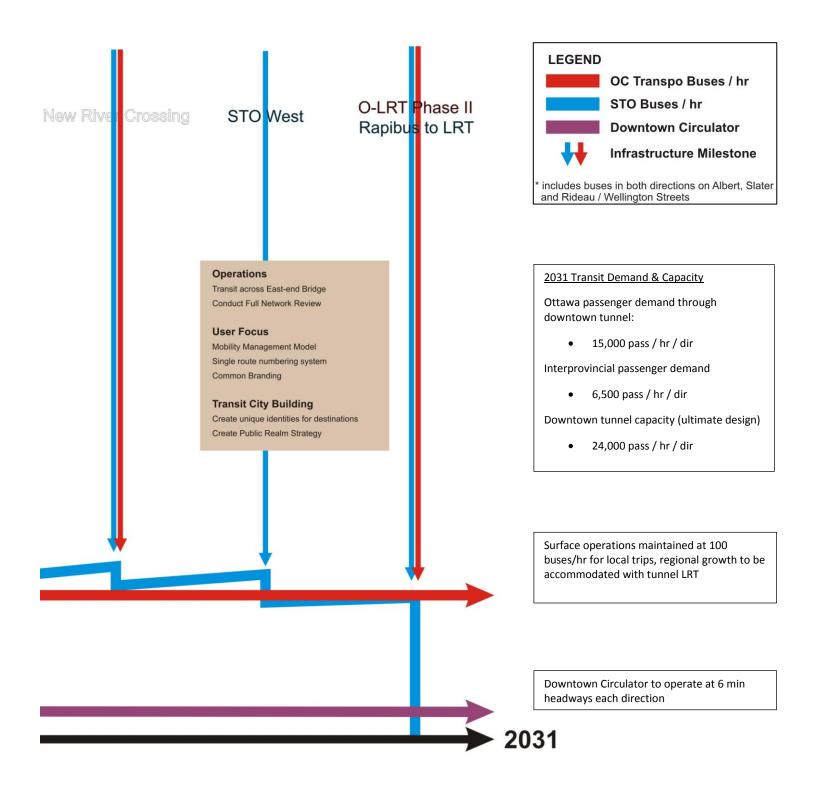
Figure 16: Phased Implementation





The volume of buses includes vehicles in both directions on Rideau, Wellington, Albert and Slater Streets during the AM peak hour.

- 180 buses on both Albert and Slater Streets and 40 buses/hr on Rideau/Wellington Street = 400 buses/hr for OC Transpo,
- 120 buses / hr on Rideau/Wellington Street, and King Edward Avenue for STO



The following statements summarize the implementation of the Interprovincial Transit Strategy:

- When Rapibus begins operation in Gatineau (in 2013), passengers will access the facility via feeder routes and will transfer onto trunk line routes to connect to downtown Ottawa mostly via Portage Bridge.
 - o Direct service to both downtown Gatineau and Ottawa (contributes to increased ridership)
 - Introduction of an additional transfer compared to today (reduction in core area buses)
 - Use of high capacity buses for Rapibus routes (reduction in core area buses)
 - o Improved PM operations with boarding on "first available" bus
- STO buses will continue to operate into downtown Ottawa; the service would still attract additional transit demand while minimizing the impact of buses on Ottawa core area streets.
 - Planning land uses and communities around transit; (Transit City Building solutions)
 - Ensure that the system is user-friendly; (Focusing on the User solutions)
 - o Provide better connections to multi-modal transfer areas and mobility hubs;
 - o Provide better connections for non-downtown destinations; (O-Train, Champlain, East-end) and
 - o Improve service efficiency of routes crossing the Ottawa River (Operational solutions)
- To attract additional midday transit demand, a downtown circulator will operate through the core areas connecting to government facilities and tourist attractions.
 - Special purpose built vehicles;
 - Contributes to image of the capital.
- In time the Rapibus will be converted to rail with service provided seamlessly to the core areas.
 - As Gatineau passenger demand increases, the number of STO buses will increase resulting in additional transit congestion in the core areas, especially at the peak point located in downtown Hull.
 - Growing transit congestions with at-grade operations in the downtown, as well as the single track bridge over the Gatineau River are examples of possible constraints which will eventually require significant investment to increase service capacity.
 - The desire for a reduction in core area buses to improve the urban environment also contributes to the justification for long term conversion of the Rapibus to LRT.
 - A future interprovincial rail facility should attempt to accommodate the most typical peak period travel
 patterns and minimize additional transfers for commuters. It is therefore recommended that the facility
 seamlessly connect to the core areas, where the majority of passengers are destined.
- For each solution, a governance model is to be adopted that best suits the project
 - Consider the complexities of jurisdictional boundaries, capital funding agreements, and service operation/maintenance.

NCC-Government of Canada

The Government of Canada does not currently operate any transit services as interprovincial transit is provided by both OC Transpo and STO. With new interprovincial transit services being proposed as part of the Strategy, the Government of Canada, through the NCC, may be required to play an increasing role in ensuring that Strategy solutions are being appropriately coordinated and implemented. Even though a separate federal transit agency is not recommended, the NCC could still provide support to the transit agencies and cities in terms of negotiating agreements and funding. This could be critical for the downtown circulator transit service as well as other infrastructure projects such as an extension of the O-Train to Gatineau.

A new east-end bridge provides an opportunity to better connect non-downtown destinations with interprovincial transit services. This federal crossing can improve transit between East Gatineau and Ottawa East / Orleans which account for approximately 10% of interprovincial trips by allowing passengers to avoid the core area. The service can be operated by STO and/or OC Transpo.

OC Transpo - City of Ottawa

OC Transpo has reached its vehicle capacity on Albert and Slater Streets as these corridors cannot accommodate more than 180 in service buses/hr/street. To accommodate regional growth, articulated buses are increasingly being operated through the core replacing existing standard buses and increasing the service capacity. Transit passengers are being required to transfer to these high capacity vehicles at major transfer stations for access through the core. The introduction of the additional transfer allows the number of core area vehicles to be minimized until such time as the Phase I LRT is operational and transit passengers will use the downtown tunnel to access the core area.

The extension of the O-Train to Hull provides an opportunity to connect passengers from South and West Ottawa to downtown Gatineau without traveling through the core. The new service could therefore provide a further reduction of buses in downtown Ottawa, and would allow for redundant routes to be eliminated (such as route 8). There will still be OC Transpo routes that continue to operate on the surface in the future to support local trips. 30 bus/hr is expected on both Albert & Slater Streets, while Rideau Street and Wellington Street will continue to accommodate the existing 40 buses/hr.

Near Term

STO Rapibus

- Implement trunk & feeder routes (includes an additional transfer)
- Introduction of articulated buses
- Reduction of buses on Wellington / Rideau

Medium Term (by 2021)

Phase I Ottawa LRT

- Downtown Tunnel and LRT from Blair to Tunney's Pasture
- 75% reduction of buses on Albert / Slater Streets

O-Train extension to Gatineau

- Benefits interprovincial trips to/from South & Central Ottawa
- Contributes to 10% reduction in buses through Ottawa Core Area

Long Term (by 2031)

East-end Crossing

- Reduction of core area vehicle congestion
- Benefits non-downtown interprovincial trips between East Gatineau and East Ottawa / Orleans
- Contributes to 10% reduction in buses through Ottawa Core Area

STO West Rapid Transit

- Service modifications improving resource efficiency across the Ottawa River
- Reduction of buses on Wellington / Rideau

Phase II Ottawa LRT

- Extension of LRT west to Baseline
- LRT from Riverside South/ Airport to Bayview

Conversion of Rapibus to LRT

- Coordinated services to downtown core areas
- Elimination of most STO buses from downtown Ottawa

Ottawa is constructing a downtown light rail transit tunnel to better accommodate planned growth and encourage modal shift from the automobile and optimize parking capacity in the core area. According to current plans, the Ottawa LRT tunnel will have sufficient passenger capacity to accommodate regional and interprovincial transit passenger demand in 2031. Analysis has recognized operational limitations to LRT multiple line capacity of the Ottawa LRT tunnel that would necessitate the accommodation of Gatineau rapid transit through transfers or operation on surface streets in downtown Ottawa.

STO - Ville de Gatineau

STO currently operates approximately 120 standard buses per hour on Rideau/Wellington Street during the AM peak Hour. With the implementation of the Rapibus facility, transit services will be redesigned as a trunk and feeder system with local buses feeding the Rapibus routes. Operating separate Rapibus routes to Ottawa and Gatineau core areas will ensure that buses crossing the Ottawa River are better utilized thereby reducing the number of interprovincial buses. The introduction of an additional transfer for approximately 65% of STO passengers results in a 10% reduction in the number of buses that travel into downtown Ottawa. Using articulated buses for the Rapibus routes will further reduce the volume by 20% as they accommodate higher passenger loads.

The extension of the O-Train to Hull provides an opportunity for non-downtown passengers to transfer to the facility and avoid traveling through the core. The new service would therefore provide a further reduction of buses in downtown Ottawa by 10%. A future west rapid transit facility is envisioned in Gatineau in the long term. Services could operate with feeder routes and high capacity trunk routes similar to the Rapibus resulting in a further reduction of buses in downtown Ottawa.

The above projects, including the transit service on the proposed east-end bridge, contribute to an approximate 50% reduction of inbound buses from Gatineau to Ottawa in the AM peak hour compared to the status quo. If there was no Rapibus route restructuring or articulated buses approximately 190 standard buses/ hr would be required in 2031. Even with the forecast increases in regional transit demand, it is expected that the proposed service plan will result in fewer than 120 interprovincial buses/hr operating into the Ottawa core. From the user's perspective, the service will be an improvement as passengers will board the "first available" bus in the afternoon.

Technical analysis has shown that direct rapid transit service between Gatineau and downtown Ottawa through interprovincial LRT offers utmost potential for increased ridership and travel time savings. This approach is viewed as being potentially contrary to Ottawa's desire for a paradigm shift of downtown streets to people. However, in order to ensure that the most appropriate configuration for interprovincial rapid transit is attained, the City of Ottawa and STO should take into account operational and policy considerations that do not preclude continuous interprovincial access and connectivity between Gatineau and downtown Ottawa.

STO will have to work closely with the City of Ottawa at the time of Rapibus conversion to address any technological constraints and/or urban design policies to ensure the minimum impact on the environment and community with the implementation of interprovincial rail in Ottawa.

Action Plan

The action plan is presented in Table 1, Table 2, and Table 3 for the short, medium, and long term timeframes, respectively. For each solution, the action plan includes a brief description, the identified lead agency to implement the solution, and other solutions that are either pre-requisites or should be considered in conjunction with the solution.

The following are key considerations in the implementation of the Strategy:

- All partners and stakeholders should support and 'own' this Strategy and the initiatives it contains. The
 Strategy should be well communicated within partner organizations with further discussions and workshops
 held if necessary.
- Members of the public should be well informed of the Strategy and the progress of individual initiatives.
- A formal monitoring process should be developed and agreed by the partners. This should include the governance and delivery mechanisms as well as the timescales included in the action plan.
- If monitoring shows that the overall objectives of the strategy are not being met, partners should agree on a management initiative to resolve the situation by, for example, providing more resources to achieve that particular objective or action.
- Partners should prioritize necessary actions according to shared objectives and available resources.
- Risks to delivery of the action plan items should be understood and managed. These could include lack of funding, not being able to achieve satisfactory joint working practices because of legal or other issues and political changes.

Table 1: Short Term Actions

Pillar	Proposal	Lead Agency *	Notes
Transit City Building	Develop Station Area Plans	STO, OCT	Link with infrastructure program
	Develop Street Design Plan	O, G, NCC	Link with user focus initiatives such as transit information, signage
	Develop Public engagement strategies	O, G, STO, NCC, with OCT	this should be initiated and will continue until all components are completed
	Prioritize pedestrian experience	NCC, G, O	Should be coordinated with station areas and street design plans
	Encourage activities accessible to all	STO, OCT (O)	Link with accessible policies and standards
	Incorporate sustainability into all aspects of design	O, G, STO,NCC	Part of Station area plans
User Focus	Provide coordinated transit information	STO, OCT	As soon as possible. This is included in the station area plans. It will also be part of the operational
	Improve customer service	STO, OCT	As soon as possible
	Improve signage and seating	STO, OCT	Link with station and stop design
	Accessibility policies and standards	STO, OCT	Link with Transit City Building above. As well, is part of overall improvements at a regional scale for riders.
	Common interprovincial branding	STO, OCT, NCC	To be launched just prior to introduction of downtown circulator
Operations	Review interprovincial services	STO, OCT	Link to user focus programs
	Develop a plan to better coordinate service control	STO, OCT	Link to user focus programs
	Develop a plan to improve reliability	STO, OCT	Link to user focus programs
	Reserved transit lanes through the core areas	O, G, NCC	Link with infrastructure program
	New "downtown circulator" transit service	STO, OCT NCC	Will require specific governance structure to oversee operation of service.
Infrastructure	Capacity analysis for future LRT routes and technologies	O, G, STO	Regional planning for transit improvements in the NCR.
	Rapibus implementation	STO	Regional planning because there will be impact on development and pedestrian activity.
	Transfer Stations / Mobility hubs	STO, OCT	Related to the user focus and transit city initiatives
Governance	Establish coordinating tripartite planning body	NCC	Governing body to establish subgroups for specific tasks
	Establish joint Advisory and Monitoring Board	NCC	Subgroup of the coordinating tripartite planning body
	Establish protocols for collaboration at operational level	NCC	Subgroup of the coordinating tripartite planning body
	Body to oversee operation of Downtown Circulator	NCC, STO & OCT	Establish prior to 2018.

Description

Guidelines and criteria for station design; design streets and blocks to ensure clear connections between transit and key destinations; design transit stations with regard to local character; ensure station sites are situated to permit development; create new public spaces adjacent to transit stations.

Consider a coordinated street furniture program, improve way-finding signage; ensure streetscape improvements align with transit improvements; require tree planting targets for new transit-oriented developments.

For consultation and involvement in strategies and programs; encourage opportunities to display and celebrate cultures, identities and stories that make up history of a neighbourhood. Link with user focus, operations, and infrastructure implementation.

Establish pedestrian-oriented design criteria for new developments along main transit corridors; implement traffic calming measures; ensure animated street environment through active building frontages at grade; implement pedestrian priority infrastructure.

Ensure accessibility for persons with disabilities through ramps, elevators, and other forms of assistance; create amenities that will attract seniors and youth to use transit (this will be included in the development of the station plans).

Use high quality, durable materials; incorporate Crime Prevention Through Environmental Design (CPTED) principles into design.

NCR trip planner; common website; NCR transit map; common layout for public information, coordinated schedules at interprovincial transfer points; common information provided at stops and stations; common system for bilingual automated stop announcements.

Sales centres for both OC Transpo and STO; one call centre; bilingual staff knowledgeable about both transit networks; common customer service centres for easy customer feedback.

Better alignment of signage, positioning and policies around priority seating; common signage standards and information formats.

Full review of accessibility policies to identify and resolve differences; common eligibility for para Transpo and para transit; common eligibility for discounts (seniors, students).

Bus branding for interprovincial Downtown Circulator.

Capacity on local transportation systems, growth to occur along transit corridors, routing of services; identification of redundant routes; scheduling to reduce lay-ups in central areas; improve transfer points.

Improve communications/dispatch/AVL via radio system compatibility for two operators; joint traffic control centres and transit signal priority technologies and standards (part of service review plan).

Include end of line recovery time and extra buses that can be introduced into service; more transit priority and transit signal priority; shorten routes and introduce transfers where practicable (part of service review plan).

Transit lanes in Gatineau on Boulevard des Allumettières, rue Montcalm, and existing HOV lanes could be designated for transit only. Wellington Street and Rideau Street in Ottawa should also include transit lanes for both STO and OC Transpo buses.

An interprovincial transit bus route is proposed that will circulate throughout the day between both core areas connection major destinations. This is an important regional service that will connect to key destinations and encourage place making around stops.

Confirmation of downtown tunnel and surface transit capacities including operational constraints.

Buses will continue to operate on surface through Gatineau and Ottawa. Higher capacity buses and route restructuring will reduce the number of interprovincial buses.

Ensure well connected and easy to use transfer facilities in both Ottawa and Gatineau. Improve connections between rapid transit facilities and access to multiple modes. The hubs also encourage transit oriented development.

For overseeing the implementation of this strategy. Includes all relevant partners to oversee operational issues that impact service delivery, reliability and ridership.

Representatives from partner organizations to oversee land use and transportation planning over whole urban NRC (in place by 2013 but will need to develop terms of reference and plan to establish other bodies as described in governance).

Create work program and including necessary operational reviews and joint products; identify lead people; establish data sharing and IT sharing principles. This will be used by the subgroup created to oversee operational issues.

Separate entity with sole mandate to be responsible for all operational requirements of the Downtown Circulator.

Table 2: Medium Term Actions (by 2018)

Pillar	Proposal	Lead Agency*	Notes
Transit City Building	Establish a parking management strategy	NCC, G, O	To be completed prior to 2018
	Transit-oriented development (TOD)	NCC, OCT, STO (O and G planning departments)	Linked to the user focus pillar as it will make it easier to access transit. Also linked to alignment of corridors and location of stations
	Coordinate bicycle strategies between Ottawa and Gatineau	NCC	Part of the mobility management model.
	Align all relevant plans across the NCR	NCC, O, G	Review to start prior to 2018
User Focus	Fares and ticketing	STO, OCT	Coordinate with review undertaken previously
	Transit priority	STO, OCT	Link with operations to improve travel times
	Standards and systems (transit stops, accessibility and fare media)	STO, OCT	Follow service review plan
Operations	Increase surface transit capacity through cores	OCT, STO	Link with User Focus transit priority measures
	Review service standards and fare policies	STO, OCT	Link with User focus program
	Develop a plan to remove other barriers to joint operations	STO, OCT	Operations group link with governance
	Greater use of Champlain Bridge for transit	STO, NCC	Link with infrastructure program
Infrastructure	O-train to Gatineau via Prince of Wales Bridge	STO, OCT, NCC	impacts on transit service planning and surrounding transit-supportive development
	Phase 1: Ottawa Light Rail Transit	OCT/Rail Office	Currently under design
Governance	Joint working in practice at all operational levels	NCC, STO, OCT	Subgroup of the coordinating tripartite planning body established in the short term actions
	Joint policy and planning arrangements in place	NCC, STO, G, OCT, O	Subgroup of the coordinating tripartite planning body established in the short term actions

Description

Consider locations, numbers, pricing and management of parking in relation to transit availability and land use requirements; limit parking in TOD's

Encourage direct linkages between transit stations and new development to maximize accessibility and encourage transit use; integrate and connect already existing networks; focus taller and denser mixed-use development on or around new transit stations; locate stations in areas where there is existing or potential transit-supportive development; ensure sites are designed to capitalize on development; ensure active ground floor uses

Ensure similar standards and processes across city boundaries

Encourage mixed-use throughout region; relate land use proposals to transit stops and corridors (review needs to take place prior to creation of policies for all NCR related to TOD and pedestrian oriented planning. Look at all policies related to urban form and transit)

Common fare system (passes, tickets, cards); common fare structure (same price increments)

Transit priority measures at bottlenecks in the vicinity of the interprovincial bridges

Compatible smart card systems; common wheelchair positions and spaces on transit vehicles; common system for night stops and emergency call boxes; common standards for determining locations of stops and stations

Use higher capacity buses; re-allocate general traffic lanes for transit; operate on more/other streets in core;

Minimum service coverage and frequencies; night stop program; accessibility standards and fares (part of service review plan)

Review current service area jurisdictions with the goal of better connecting non-downtown origins and destinations (i.e. allow STO buses to travel further into Ottawa to connect with key nodes such as major rapid transit stations and employment centres. Streamline data collection methods to improve coordinated service planning.

To reduce the number of buses passing through downtown Gatineau and crossing into Ottawa via the Portage Bridge, it is proposed that STO buses may be able to better use this existing underutilized infrastructure and connect to Ottawa's planned LRT network at Tunney's Pasture. Routes could also serve other key areas in Ottawa improving connections to various destinations and reducing transit requirements in the core area.

Supplements transit in core areas prior to east-end bridge construction. Allows for better interprovincial connections for Ottawa residents as well as for Gatineau residents destined to areas outside the core, especially the federal government nodes at Carling and Confederation Stations.

Initial light rail implementation in Ottawa between Tunney's Pasture and Blair Stations with service operating through a downtown transit tunnel.

Both operators working as if a single transit network (continuation of work already initiated)

All agencies working as if a single planning region. Subgroup established by the tripartite body will oversee the collaboration of planning and policy.

Table 3: Long Term Actions (by 2031)

Pillar	Proposal	Lead Agency*	Notes	Description
Transit City Building	Create a coordinated public realm strategy supporting streetscape redevelopment	NCC, O , G	Coordinate with station design & mobility plans	Incorporate public art; seamless integration to balance transportation modes and create complete streets; give priority to walking, cycling, and public transit in the central area
	Create unique identities for destinations	NCC O, G		Promote walkable neighbourhoods through unique retail and gallery experiences and improved signage and urban design; design central transit loop as a destination in itself; ensure development and transit are compatible with heritage
User Focus	Provide a fully integrated transit network	STO, OCT	Link with Governance	Single route numbering system; common branding for all transit vehicles; one fare collection system
	Develop a regional mobility management model	STO, OCT	Link with Governance	Consider mobility as a whole & not each mode separately. Improves travel demand management and encouragement of transit and active transportation.
Operations	Provide transit route on the planned east-end bridge connecting to key rapid transit stations	STO, OCT, NCC	To coincide with the completion of the crossing	Includes a new bus route that travels between the Rapibus corridor in Gatineau and the planned LRT in Ottawa using the new east-end interprovincial bridge; enables passengers to cross between Ottawa and Gatineau without traveling through the downtown core area
	Conduct full network review	OCT, STO	Link with User Focus and Governance	This is a region-wide review considering the short and medium term solutions that have been implemented. Can impact existing transit planning and surrounding transit-supportive development.
Infrastructure	Upgrade O-Train to LRT	NCC, STO, OCT, O, G	Prior to 2031	Once the North-South LRT is being considered for implementation, provide a connection across the Ottawa River connecting the facility with the Rapibus corridor and/or downtown Gatineau.
	Upgrade Rapibus to LRT	NCC, STO, OCT, O,	Prior to 2031	A coordinated rail facility should provide service for passengers from east Gatineau to downtown Gatineau and downtown Ottawa.
Governance	Collaborative planning model	NCC	In place by 2031	Complementary plans and policies in place; consistent operational requirements and standards, collaboration amongst partners to establish a framework for mobility management model.

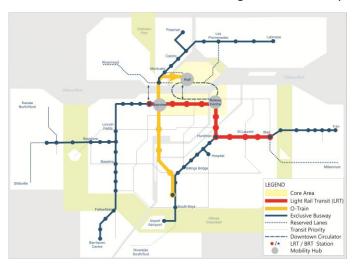


Figure 17: 2021 Rapid Transit Network

- Downtown Circulator
- Maximize Use of Champlain Bridge
- Phase I OLRT Blair to Tunney's Pasture
- Extension of O-Train North to Gatineau

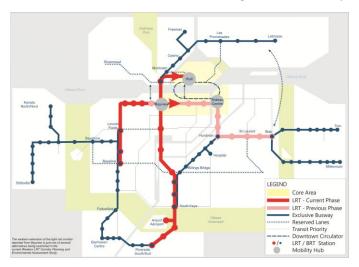


Figure 18: 2031 Rapid Transit Network

- Transit on East-end Bridge
- Phase II OLRT Tunney's Pasture to Baseline
- Conversion of O-Train to LRT and Extension South



Figure 19: Long-Term (Post 2031) Rapid Transit Network

- Conversion of Rapibus to rail
- Coordinated and continuous light rail transit between Ottawa and Gatineau core areas





CONCLUSIONS

This report summarizes the main features of the Interprovincial Transit Strategy, bringing together the vision of sustainable mobility and environmentally friendly transportation with an analysis of current issues and proposals, contributions from the public and ideas from an international panel of transit professionals. These have been developed in the Five Pillars of the Strategy: Transit City Building, Focusing on the User, Operations, Infrastructure and Governance. Each set of solutions in each Pillar has been evaluated during continued cycles of public engagement leading to a recommended action plan.

The Strategy focuses on measures needed to move transportation in the NCR towards the vision of sustainable mobility and environmentally friendly transportation, where people have seamless, user focused and valued transportation options including access to high quality public transit. This includes seamless transit across Ottawa and Gatineau as well as improvements within each city. Solutions range from joint working initiatives that could be set in motion very quickly to more complex infrastructure and technology requirements that will need further study and assessments. But together they provide the framework for a transit network suitable for the future of Canada's Capital.

While transit services in the National Capital Region are already valued by their many existing users, improvements are required to maintain and improve on the NCR's competitive position and encourage sustainable transportation while accommodating the increasing demands on all transportation systems across the two cities.

The goal of this strategy is to improve interprovincial transit services, attract more transit riders and reduce the number of single occupancy vehicle trips. To achieve this, the following is recommended:

- Take steps to work collaboratively towards interprovincial transit that is seamless and represents a unified system for passengers through measures including network design and operations.
- Take steps to provide an extension of the O-Train / North-South LRT to Gatineau via the Prince of Wales Bridge.
- Take steps to work collaboratively over the longer term towards conversion of Rapibus to rail rapid transit in ways that will enhance interprovincial transit services.

The report includes several specific policies and measures that can be adopted and/or studied further as outlined below:

- The urban NCR needs to be planned as a whole, providing integrated land use and transportation, with transit continuing to play a key role
- Both transit operators need to increase their focus on improving the user experience of transit, making services seamless, easy to use and value-added
- Limited investment in improved interprovincial infrastructure, ticketing, management and marketing could have high levels of benefits and should be considered together
- A "downtown circulator" route is proposed to improve service for midday tourism and work related travel in and around the core
- Existing bridges outside the core area should be better utilized to minimize the core area transit demand and better connect non-downtown destinations. Supplementary technical analysis as part of the interprovincial Crossings EA has revealed use of the crossing by transit could make a vital contribution to maintaining and improving interprovincial transit modal share.
- A coordinated rail network is the best long term rapid transit technology for the whole of the urban NCR, with buses providing feeder service
- An O-Train extension to Hull via the Prince of Wales Bridge in the medium term could provide relief
 to existing core area transit infrastructure and better connect non-downtown destinations to
 improve overall network connectivity. This facility would eventually undergo conversion to LRT
 with additional extensions to the South
- Work collaboratively towards achieving more seamless and connected interprovincial transit in
 ways that do not compromise or jeopardize opportunities for a continuous and cohesive
 interprovincial rapid transit plan and protect for rail rapid transit service integration between
 Ottawa and Gatineau over the long term.

The parties recognize that integrated interprovincial transit is an ambitious strategic vision, and that continued cooperation is imperative for the provision of more effective and better integrated interprovincial transit for enhanced ridership and service. This vision can only be met through collaboration on the recommended plans, policies and measures to enhance connectivity, continuity and uniformity of services, improving ridership by discouraging automobile use and reducing the number of buses by reconfiguring transit services in the core area.

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